

TOSHIBA

Sophisticated Group Controller
(Group Controller Series4)

RBP-GC004TP-E

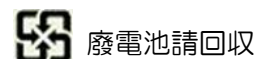
Installation & Owner's Manual

Multilingual installation manuals and owner's manual



[Česky] Stažení Instalační příručky a Uživatelské příručky
[Deutsch] Installationshandbuch und Bedienungsanleitung herunterladen
[Ελληνικά] Λήψη εγχειριδίου εγκατάστασης και εγχειριδίου κατόχου
[English] Installation manual and Owner's manual Download
[Hrvatski] Preuzimanje Instalacijskog priručnika i Vlasničkog priručnika
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[Български] Изтеглете Ръководство за инсталиране и Ръководство за собственика

<https://www.toshiba-carrier.co.jp/global/manual/rbp-gc004-e.htm>



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1 Precautions

1-1 Safety precautions

Explains safety precautions you must follow in order to prevent harm to the user and other persons and damage to property.

“Display Description” explains the classification of the degree of harm or damage that may occur if the unit is handled incorrectly while “Symbol Description” indicates the meanings of symbols.

Display Description



WARNING

Indicates “Content that is expected to result in death or serious injury (*1) to the user in the case of incorrect handling”.



CAUTION

Indicates “Content that is expected to result in minor injury (*2) to the user or damage to property (*3) in the case of incorrect handling”.

Symbol Description



Indicates prohibited actions. Specifically prohibited contents are indicated with a picture and/or text in or near the symbol.



Indicates instructions which must be followed. The actual contents of the instructions are indicated with a picture and/or text in or near the symbol.

*1: Serious injury refers to lasting after effects such as blindness, injury, burns (high temperature / low temperature), electric shock, bone fracture, or poisoning, etc and injuries that require hospitalization/long-term outpatient treatment.

*2: Minor injury refers to injuries, burns, or electric shocks, etc, that do not require hospitalization or long-term outpatient treatment.

*3: Damage to property refers to extended damage related to buildings, equipment, or livestock, etc.

! WARNING



Installation Precautions


| | | | |
|----------------------------|---|----------------|--|
| Request installation | <p>Ask an authorized dealer or qualified installation professional to install or reinstall this unit. Installation requires professional knowledge and skills. Inappropriate installation by the user may cause fire, electric shock, or injury.</p> | Compulsory | <p>Always connect to ground. Improper grounding may result in an electric shock. Carry out grounding before connecting the power. The work must satisfy all local and national regulations.</p> |
| Use specified products | <p>Use the heat source products designated by us. Please use the heat source products designated by us. Using products other than specified may cause fire, electric shock, or water leakage. Also, please ask a professional for installation work.</p> | Compulsory | <p>Electrical work must be performed by a qualified electrician in accordance with the Installation Manual. The work must satisfy all local and national regulations. Inappropriate work may result in electric shock of fire. Before performing work, be sure to turn off the power. Otherwise, electric shock may occur.</p> |
| Prohibited | <p>The group controller cannot be connected to the Internet. Never connect it to the Internet. We shall assume no liability for any problems caused by connecting it to the Internet. It can be connected only to a local area network.</p> | Prohibited | <p>Do not connect it to any electrical appliances or other pieces of equipment that do not comply with all local and national regulations.</p> |

Usage Precautions




| | | | |
|----------------|--|----------------|---|
| Prohibited | <p>Do not operate the switches with wet hands. Doing so may cause electric shock or failure.</p> | Prohibited | <p>Do not let group controllers get wet. Be careful not to let the group controllers get wet. Otherwise, a fire, electric shock, or failure may occur.</p> |
| Compulsory | <p>Turn off the power if anything is abnormal (burnt odour etc). Continued use may cause fire or electric shock. Please ask the dealer from whom you purchased the product.</p> | Compulsory | <p>Do not use a power supply other than the specified one. Using a power supply other than the specified one may cause fire or failure. Use a 100 VAC or 200 VAC power supply.</p> |



Relocation & Repair Precautions


| | |
|---|---|
|  Prohibited | Do not modify the unit. A fire or an electric shock may occur. |
|  Request relocation | Ask an authorised dealer or qualified installation professional to move and re-install the heat source devices. Inappropriate installation may cause fire, electric shock, or injury. |


| | |
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|  Request | Please ask the dealer from whom you purchased the unit for repair. Faulty repair may cause fire or electric shock. |
|--|--|

 **CAUTION****Installation Precautions**



| | |
|--|---|
|  Check the installation location | Do not install in a location with high humidity or in a location with frequent vibration. Doing so may cause a failure. |
|  Check the installation location | Do not install in a location where noise is generated. Doing so may cause malfunction. |
|  Check the installation location | Do not install in a locations where children may be present. |


| | |
|--|--|
|  Check the installation location | Do not install in a location subject to direct sunlight or near a heat source. Doing so may cause a failure. |
|  Check the installation location | Do not install in a location where combustible gas may leak. If gas leaks and accumulates around the product, it may cause combustion. |

| | |
|---|--|
|  Prohibited | Do not install in the following locations. <ul style="list-style-type: none"> • Locations where combustible gas may leak. • Locations with high humidity or water. • Dusty locations. • Locations in direct sunlight and locations subject to high temperatures. • Locations within 1 m from televisions or radios. • Outdoors, under awnings, or other locations exposed to rain and dew. • Locations exposed to outside air containing corrosive gases or salinity. • Locations with frequent vibrations. |
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|  Compulsory | For wiring, make sure that the current capacity is correct. Otherwise, electric leakage, heat generation, fire, etc. may occur. For wiring, use prescribed cables and ensure secure connection so as not to allow external force of the cables to apply to terminal connections. Otherwise, disconnections, heat generation, or fire may occur. Be sure to install a circuit breaker on the primary side of the power supply. Install it in the control panel, for example. |
|---|--|

Usage Precautions

| | |
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|  Prohibited | Do not drop the product or apply strong shock. Doing so may cause a failure. |
|  Request | Before maintenance or inspection, turn off the earth-leakage breaker. Otherwise, injury may occur. |

| | |
|---|--|
|  | In the event of an error in this product, turn off the main power supply and ask the dealer from whom you purchased the product. Continued operation of the product without removing the error may cause fire or electric shock. |
|---|--|

1 Vorsichtsmaßnahmen

1-1 Sicherheitsvorkehrungen

Erklärt die Sicherheitsvorkehrungen, die Sie beachten müssen, um Verletzungen für den Benutzer und andere Personen sowie Sachschäden zu vermeiden.

„Anzeigebeschreibung“ erklärt die Klassifizierung des Schweregrads der Gefährdung oder Beschädigung bei falscher Handhabung des Geräts, während „Symbolbeschreibung“ die Bedeutungen der Symbole erläutert.

Anzeigebeschreibung



WARNUNG

Weist darauf hin, dass der „Inhalt bei unsachgemäßer Handhabung beim Benutzer zu schweren oder tödlichen Verletzungen (*1) führen kann“.



VORSICHT

Weist darauf hin, dass der „Inhalt bei unsachgemäßer Handhabung für den Benutzer zu geringfügigen Personen- (*2) oder Sachschäden (*3) führen kann“.

Symbolbeschreibung



Weist auf verbotene Handlungen hin. Auf ausdrücklich verbotene Inhalte wird mit einem Bild und/oder Text in oder neben dem Symbol hingewiesen.



Weist auf Anweisungen hin, die befolgt werden müssen. Auf den tatsächlichen Inhalt der Anleitung wird mit einem Bild und/oder Text in oder neben dem Symbol hingewiesen.

- *1: Schwere Verletzung bezieht sich auf Auswirkungen wie Erblindung, Verletzung, Verbrennungen (hohe Temperatur / geringe Temperatur), Stromschlag, Knochenbruch, Vergiftung usw. und Verletzungen, die einen Krankenhausaufenthalt bzw. eine langfristige ambulante Behandlung erforderlich machen.
- *2: Leichte Verletzung bezieht sich auf Verletzungen, Verbrennungen oder Stromschläge usw., die keinen Krankenhausaufenthalt oder eine längerfristige ambulante Behandlung erforderlich machen.
- *3: Sachschäden beziehen sich auf größere Schäden an Gebäuden, Geräten, Vieh oder Haustieren usw.

! WARNUNG




Vorsichtsmaßnahmen bei der Installation

| | | | |
|-----------------------------------|---|-------------------|---|
| Installation anfordern | <p>Bitte Sie einen Vertragshändler oder einen qualifizierten Installationsfachmann, dieses Gerät zu installieren oder erneut zu installieren. Die Installation erfordert professionelle Kenntnisse und Fähigkeiten. Eine unsachgemäße Installation durch den Benutzer kann zu einem Brand, Stromschlag oder einer Verletzung führen.</p> | Obligatorisch | <p>Gerät immer erden. Unsachgemäße Erdung kann zu einem Stromschlag führen. Führen Sie eine Erdung aus, bevor Sie die Stromversorgung anschließen. Die Arbeiten müssen allen lokalen und nationalen Vorschriften entsprechen.</p> |
| Angegebene Produkte verwenden | <p>Die von uns angegebenen Wärmequellenprodukte verwenden. Bitte verwenden Sie die von uns angegebenen Wärmequellenprodukte. Wenn Sie andere als die angegebenen Produkte verwenden, kann es zu Brand, Stromschlag oder Wasserlecks kommen. Bitte Sie außerdem einen Fachmann, die Installation durchzuführen.</p> | Obligatorisch | <p>Die elektrischen Arbeiten müssen von einem qualifizierten Elektriker gemäß dem Installationshandbuch ausgeführt werden. Die Arbeiten müssen allen lokalen und nationalen Vorschriften entsprechen. Unsachgemäße Arbeit kann zu einem Stromschlag oder Brand führen. Schalten Sie vor Beginn der Arbeiten unbedingt die Stromversorgung aus. Andernfalls kann es zu einem Stromschlag kommen.</p> |
| Verboten | <p>Die Gruppensteuerung kann nicht mit dem Internet verbunden werden. Verbinden Sie sie niemals mit dem Internet. Wir übernehmen keine Haftung für Probleme, die aufgrund einer Verbindung mit dem Internet entstehen. Sie kann nur mit einem lokalen Netzwerk verbunden werden.</p> | Verboten | <p>Schließen Sie das Gerät nicht an elektrische Geräte oder andere Ausrüstungsgegenstände an, die nicht allen lokalen und nationalen Vorschriften entsprechen.</p> |






Vorsichtsmaßnahmen bei der Verwendung



| | | | |
|-------------------|---|-------------------|--|
| Verboten | <p>Betätigen Sie die Schalter nicht mit nassen Händen. Andernfalls kann es zu einem Stromschlag oder einer Fehlfunktion kommen.</p> | Verboten | <p>Lassen Sie die Gruppensteuerungen nicht nass werden. Achten Sie darauf, dass die Produkte der zentralen Steuerung nicht nass werden. Andernfalls kann es zu einem Brand, Stromschlag oder einer Fehlfunktion kommen.</p> |
| Obligatorisch | <p>Falls Sie etwas Ungewöhnliches feststellen (Brandgeruch usw.), schalten Sie das Gerät aus. Wenn Sie es weiterhin benutzen, kann es zu einem Brand oder Stromschlag kommen. Wenden Sie sich bitte an den Händler, bei dem Sie das Produkt gekauft haben.</p> | Obligatorisch | <p>Verwenden Sie keine andere als die angegebene Stromversorgung. Wenn Sie eine andere als die angegebene Stromversorgung verwenden, kann dies zu einem Brand oder einer Fehlfunktion führen. Verwenden Sie eine Stromversorgung mit 100 V oder 200 V Wechselstrom.</p> |

Vorsichtsmaßnahmen bei Standortwechsel und Reparatur




| | | | |
|---|---|--|--|
|  Verboten | Verändern Sie das Gerät nicht. Es könnte zu einem Brand oder einem Stromschlag kommen. |  Anfrage | Bitte wenden Sie sich wegen der Reparatur an den Händler, bei dem Sie das Gerät gekauft haben. Eine fehlerhafte Reparatur kann einen Brand oder Stromschlag verursachen. |
|  Standortwechsel beantragen | Bitte einen Vertragshändler oder einen qualifizierten Installateur, die Wärmequellenprodukte an einen anderen Standort zu bringen und erneut zu installieren. Eine unsachgemäße Installation kann zu einem Brand, Stromschlag oder einer Verletzung führen. | | |

⚠ VORSICHT**Vorsichtsmaßnahmen bei der Installation**

| | | | |
|--|---|--|--|
|  Überprüfen Sie den Installationsort | Installieren Sie das Gerät nicht an einem Ort mit hoher Luftfeuchtigkeit oder häufigen Vibrationen. Dies kann zu einer Fehlfunktion führen. |  Überprüfen Sie den Installationsort | Installieren Sie das Gerät nicht an einem Ort mit direkter Sonneneinstrahlung oder in der Nähe einer Wärmequelle. Dies kann zu einer Fehlfunktion führen. |
|  Überprüfen Sie den Installationsort | Installieren Sie das Gerät nicht an einem Ort mit starkem elektrischem Rauschen. Dies kann zu einer Fehlfunktion führen. |  Überprüfen Sie den Installationsort | Installieren Sie das Gerät nicht an einem Ort, an dem brennbare Gase austreten können. Wenn Gas austritt und sich in der Nähe des Produkts ansammelt, kann es zu Verbrennungen kommen. |
|  Überprüfen Sie den Installationsort | Das Gerät nicht an Orten verwenden, an denen Kinder anwesend sein könnten. | | |

| | | | |
|---|---|--|---|
|  Verboten | Installieren Sie das Gerät nicht an den folgenden Orten. Orte, an denen brennbares Gas austreten könnte. • Orte mit hoher Luftfeuchtigkeit oder Wasser. • Staubige Orte. • Orte mit direkter Sonneneinstrahlung und hohen Temperaturen. • Orte mit einem Abstand von weniger als 1 m zu Fernseh-, Funk- oder Radiogeräten. • Im Freien, unter Markisen oder an anderen Orten, die Regen und Tau ausgesetzt sind. • Orte, die einer Außenluft mit korrosiven Gasen oder salzhaltiger Atmosphäre ausgesetzt sind. • Orte, an denen häufig Vibrationen auftreten. |  Obligatorisch | Vergewissern Sie sich bei der Verkabelung, dass die Stromstärke ausreichend ist. Andernfalls kann es zu Stromausfällen, Hitzeentwicklung, Feuer usw. kommen. Verwenden Sie für die Verkabelung die vorgeschriebenen Kabel und achten Sie auf eine sichere Verbindung, damit keine äußere, von den Kabeln ausgehende Kraft auf die Anschlüsse einwirken kann. Andernfalls können Unterbrechungen, Wärmeentwicklung oder ein Brand auftreten. Stellen Sie sicher, dass Sie auf der Primärseite der Stromversorgung einen Trennschalter installieren. Installieren Sie ihn z. B. im Bedienfeld. |
|---|---|--|---|

Vorsichtsmaßnahmen bei der Verwendung

| | | | |
|--|---|--|---|
|  Verboten | Lassen Sie das Produkt nicht fallen und setzen Sie es keinen starken Stößen aus. Dies kann zu einer Fehlfunktion führen. |  Überprüfen Sie den Installationsort | Sollte bei diesem Produkt ein Fehler auftreten, schalten Sie die Hauptstromversorgung aus und wenden Sie sich an den Händler, bei dem Sie das Produkt gekauft haben. Wenn Sie das Gerät weiterhin benutzen, ohne den Fehler zu beheben, kann dies zu einem Brand oder Stromschlag führen. |
|  Überprüfen Sie den Installationsort | Schalten Sie vor der Wartung oder Inspektion den Fehlerstromschutzschalter aus. Andernfalls kann es zu Verletzungen kommen. | | |

1 Προφυλάξεις

1-1 Προφυλάξεις ασφαλείας

Εξηγεί τις προφυλάξεις ασφαλείας που πρέπει να ακολουθήσετε προκειμένου να αποτρέψετε βλάβες στον χρήστη και σε άλλα άτομα και ζημιές σε περιουσιακά στοιχεία.

Η «Περιγραφή οθόνης» εξηγεί την ταξινόμηση του βαθμού βλάβης ή ζημιές που μπορεί να προκληθεί σε περίπτωση λανθασμένου χειρισμού της μονάδας, ενώ η «Περιγραφή συμβόλων» υποδεικνύει τις σημασίες των συμβόλων.

Περιγραφή οθόνης



ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Υποδεικνύει «Περιεχόμενο που αναμένεται να οδηγήσει σε θάνατο ή σοβαρό τραυματισμό (*1) του χρήστη σε περίπτωση εσφαλμένου χειρισμού».



ΠΡΟΣΟΧΗ

Υποδεικνύει «Περιεχόμενο που αναμένεται να οδηγήσει σε ελαφρύ τραυματισμό (*2) του χρήστη ή σε υλικές ζημιές (*3) σε περίπτωση εσφαλμένου χειρισμού».

Περιγραφή συμβόλου



Υποδεικνύει απαγορευμένες ενέργειες. Τα συγκεκριμένα απαγορευμένα περιεχόμενα υποδεικνύονται με εικόνα ή/και κείμενο μέσα ή κοντά στο σύμβολο.



Υποδεικνύει οδηγίες που πρέπει να τηρούνται. Το πραγματικό περιεχόμενο των οδηγιών υποδεικνύεται με εικόνα ή/και κείμενο μέσα ή κοντά στο σύμβολο.

*1: Ο σοβαρός τραυματισμός αναφέρεται σε μακροχρόνιες μεταγενέστερες συνέπειες όπως τύφλωση, τραυματισμός, εγκαύματα (υψηλή θερμοκρασία/χαμηλή θερμοκρασία), ηλεκτροπληξία, κάταγμα οστών ή δηλητηρίαση κ.λπ. και τραυματισμοί που απαιτούν νοσηλεία/μακροχρόνια εξωνοσοκομειακή περίθαλψη.

*2: Ο ελαφρύς τραυματισμός αναφέρεται σε τραυματισμούς, εγκαύματα ή ηλεκτροπληξία κ.λπ. που δεν απαιτούν νοσοκομειακή περίθαλψη ή μακροχρόνια θεραπεία στα εξωτερικά ιατρεία.

*3: Οι υλικές ζημιές αναφέρονται σε εκτεταμένες ζημιές που σχετίζονται με κτήρια, εξοπλισμό, ζώα ή κατοικίδια ζώα κ.λπ.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ



Προφυλάξεις εγκατάστασης


| | | | |
|----------------------------------|---|------------------|---|
| Αίτημα εγκατάστασης | <p>Ζητήστε από έναν εξουσιοδοτημένο αντιπρόσωπο ή εξειδικευμένο επαγγελματία εγκατάστασης να εγκαταστήσει ή να επανατοποθετήσει αυτή τη μονάδα. Η εγκατάσταση απαιτεί επαγγελματικές γνώσεις και δεξιότητες. Η ακατάλληλη εγκατάσταση από τον χρήστη μπορεί να προκαλέσει πυρκαγιά, ηλεκτροπληξία ή τραυματισμό.</p> | Υποχρεωτικό | <p>Συνδέετε πάντα στη γείωση. Η ακατάλληλη γείωση μπορεί να προκαλέσει ηλεκτροπληξία. Πραγματοποιήστε εργασίες γείωσης προτού συνδέσετε το ρεύμα. Οι εργασίες πρέπει να πληρούν τις απαιτήσεις όλων των τοπικών και εθνικών κανονισμών.</p> |
| Χρήση καθορισμένων προϊόντων | <p>Χρησιμοποιήστε τα προϊόντα πηγής θερμότητας που έχουν οριστεί από εμάς. Παρακαλούμε χρησιμοποιήστε τα προϊόντα πηγής θερμότητας που έχουμε ορίσει. Η χρήση προϊόντων διαφορετικών από τα καθορισμένα μπορεί να προκαλέσει πυρκαγιά, ηλεκτροπληξία ή διαρροή νερού. Επίσης, ζητήστε από έναν επαγγελματία για τις εργασίες εγκατάστασης.</p> | Υποχρεωτικό | <p>Οι ηλεκτρολογικές εργασίες πρέπει να εκτελούνται από ειδικευμένο ηλεκτρολόγο με βάση τις οδηγίες που παρατίθενται στο Εγχειρίδιο εγκατάστασης. Οι εργασίες πρέπει να πληρούν τις απαιτήσεις όλων των τοπικών και εθνικών κανονισμών. Οι ακατάλληλες εργασίες μπορεί να προκαλέσουν ηλεκτροπληξία ή πυρκαγιά. Πριν από την εκτέλεση εργασιών, φροντίστε να απενεργοποιήσετε το ρεύμα. Διαφορετικά, μπορεί να προκληθεί ηλεκτροπληξία.</p> |
| Απαγορεύεται | <p>Ο ελεγκτής ομάδας δεν μπορεί να συνδεθεί στο Διαδίκτυο. Μην το συνδέετε ποτέ στο Διαδίκτυο. Δεν αναλαμβάνουμε καμία ευθύνη για τυχόν προβλήματα που θα προκληθούν από τη σύνδεσή του στο Διαδίκτυο. Μπορεί να συνδεθεί μόνο σε τοπικό δίκτυο.</p> | Απαγορεύεται | <p>Δεν πρέπει να συνδέσετε τη μονάδα με ηλεκτρικές συσκευές ή άλλα είδη εξοπλισμού που δεν συμμορφώνονται με όλους τους τοπικούς και εθνικούς κανονισμούς.</p> |

Προφυλάξεις χρήσης




| | | | |
|------------------|--|------------------|---|
| Απαγορεύεται | <p>Μην χειρίζεστε τους διακόπτες με βρεγμένα χέρια. Κάτι τέτοιο μπορεί να προκαλέσει ηλεκτροπληξία ή βλάβη.</p> | Απαγορεύεται | <p>Μην αφήνετε τους ελεγκτές ομάδας να βραχούν. Προσέξτε να μην αφήσετε τα προϊόντα κεντρικού ελέγχου να βραχούν. Διαφορετικά, μπορεί να προκληθεί πυρκαγιά, ηλεκτροπληξία ή βλάβη.</p> |
| Υποχρεωτικό | <p>Απενεργοποιήστε το ρεύμα εάν υπάρχει κάτι μη φυσιολογικό (οσμή καμένου κ.λπ.). Η συνέχιση της χρήσης μπορεί να προκαλέσει πυρκαγιά ή ηλεκτροπληξία. Ρωτήστε τον αντιπρόσωπο από τον οποίο αγοράσατε το προϊόν.</p> | Υποχρεωτικό | <p>Μην χρησιμοποιείτε άλλο τροφοδοτικό από το καθορισμένο. Η χρήση τροφοδοτικού διαφορετικού από το καθορισμένο μπορεί να προκαλέσει πυρκαγιά ή βλάβη. Χρησιμοποιήστε τροφοδοτικό 100 VAC ή 200 VAC.</p> |



Προφυλάξεις μετεγκατάστασης και επισκευής


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|  Απαγορεύεται | Μην τροποποιείτε τη μονάδα. Μπορεί να προκληθεί πυρκαγιά ή ηλεκτροπληξία. |
|  Αίτημα μετεγκατάστασης | Ζητήστε από έναν εξουσιοδοτημένο αντιπρόσωπο ή εξειδικευμένο επαγγελματία εγκατάστασης να μετακινήσει και να επανατοποθετήσει τα προϊόντα πηγής θερμότητας. Η ακατάλληλη εγκατάσταση μπορεί να προκαλέσει πυρκαγιά, ηλεκτροπληξία ή τραυματισμό. |


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|  Αίτημα | Ζητήστε την επισκευή από τον αντιπρόσωπο από τον οποίο αγοράσατε τη μονάδα. Η ελαττωματική επισκευή μπορεί να προκαλέσει πυρκαγιά ή ηλεκτροπληξία. |
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ΠΡΟΣΟΧΗ**Προφυλάξεις εγκατάστασης**


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|  Ελέγξτε τη θέση εγκατάστασης | Μην εγκαταστήσετε σε χώρο με υψηλή υγρασία ή σε χώρο με συχνές δονήσεις. Κάτι τέτοιο μπορεί να προκαλέσει βλάβη. |
|  Ελέγξτε τη θέση εγκατάστασης | Μην εγκαταστήσετε σε σημείο όπου δημιουργείται θόρυβος. Κάτι τέτοιο μπορεί να προκαλέσει δυσλειτουργία. |
|  Ελέγξτε τη θέση εγκατάστασης | Μη χρησιμοποιείτε αυτήν τη συσκευή σε μέρη όπου μπορεί να υπάρχουν παιδιά |


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|  Ελέγξτε τη θέση εγκατάστασης | Μην εγκαταστήσετε σε σημείο που δέχεται άμεσο ηλιακό φως ή κοντά σε πηγή θερμότητας. Κάτι τέτοιο μπορεί να προκαλέσει βλάβη. |
|  Ελέγξτε τη θέση εγκατάστασης | Μην εγκαταστήσετε σε σημείο όπου μπορεί να διαρρεύσει εύφλεκτο αέριο. Εάν το αέριο διαρρεύσει και συσσωρευτεί γύρω από το προϊόν, μπορεί να προκαλέσει καύση. |

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|  Απαγορεύεται | Μην εγκαθιστάτε στις ακόλουθες θέσεις. Θέσεις όπου μπορεί να διαρρεύσει εύφλεκτο αέριο. • Τοποθεσίες με υψηλή υγρασία ή νερό. • Σκονισμένες τοποθεσίες. • Τοποθεσίες με άμεσο ηλιακό φως και τοποθεσίες που υπόκεινται σε υψηλές θερμοκρασίες. • Τοποθεσίες σε απόσταση 1 m από τηλεοράσεις ή ραδιόφωνα. • Σε εξωτερικούς χώρους, κάτω από τέντες ή σε άλλα σημεία εκτεθειμένα στη βροχή και τη δροσιά. • Θέσεις που εκτίθενται σε εξωτερικό αέρα που περιέχει διαβρωτικά αέρια ή αλατότητα. • Τοποθεσίες με συχνές δονήσεις. |
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|  Υποχρεωτικό | Για την καλωδίωση, βεβαιωθείτε ότι η χωρητικότητα ρεύματος είναι σωστή. Διαφορετικά, μπορεί να προκληθεί ηλεκτρική διαρροή, παραγωγή θερμότητας, πυρκαγιά κ.λπ. Για την καλωδίωση, χρησιμοποιήστε τα προβλεπόμενα καλώδια και εξασφαλίστε ασφαλή σύνδεση, ώστε να μην ασκείται εξωτερική δύναμη από τα καλώδια στις συνδέσεις των ακροδεκτών. Διαφορετικά, ενδέχεται να προκληθούν αποσυνδέσεις, παραγωγή θερμότητας ή πυρκαγιά. Βεβαιωθείτε ότι έχετε εγκαταστήσει διακόπτη κυκλώματος στην πρωτεύουσα πλευρά του τροφοδοτικού. Εγκαταστήστε τον στον πίνακα ελέγχου, για παράδειγμα. |
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Προφυλάξεις χρήσης

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|  Απαγορεύεται | Μην αφήνετε το προϊόν να πέσει και μην προκαλείτε ισχυρούς κραδασμούς. Κάτι τέτοιο μπορεί να προκαλέσει βλάβη. |
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|  | Πριν από τη συντήρηση ή την επιθεώρηση, απενεργοποιήστε τον διακόπτη γείωσης. Διαφορετικά, μπορεί να προκληθεί τραυματισμός. |
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Σε περίπτωση σφάλματος σε αυτό το προϊόν, απενεργοποιήστε την κύρια παροχή ρεύματος και ρωτήστε τον αντιπρόσωπο από τον οποίο αγοράσατε το προϊόν.
Η συνέχιση της λειτουργίας του προϊόντος χωρίς την αφαίρεση του σφάλματος μπορεί να προκαλέσει πυρκαγιά ή ηλεκτροπληξία.

1 Önlemler

1-1 Güvenlik önlemleri

Kullanıcıya ve diğer kişilere zarar gelmesini ve maddi hasarı önlemek için uymanız gereken güvenlik önlemlerini açıklar.

“Ekran Açıklaması” ünite yanlış bir şekilde kullanılırsa meydana gelebilecek zarar veya hasar derecesi sınıflandırmasını açıklarken, “Sembol Açıklaması” sembollerin anlamlarını gösterir.

Ekran Açıklaması



UYARI

“Yanlış kullanılması durumunda kullanıcının ölümüyle veya ciddi bir şekilde yaralanmasıyla (*1) sonuçlanması beklenen içerik” olduğunu gösterir.



DİKKAT

“Yanlış kullanılması durumunda kullanıcının hafif bir şekilde yaralanmasıyla (*2) veya maddi hasarla (*3) sonuçlanması beklenen içerik” olduğunu gösterir.

Sembol Açıklaması



Yasak eylemleri gösterir. Özellikle yasaklanan içerikler, sembol içinde veya yakınında bir resim ve/veya metin ile gösterilir.



Uyulması gereken talimatları gösterir. Talimatların gerçek içeriği, sembol içinde veya yakınında bir resim ve/veya metin ile gösterilir.

*1: Ciddi yaralanma; körlük, sakatlık, yanıklar (yüksek sıcaklık/düşük sıcaklık), elektrik çarpması, kemik kırılması veya zehirlenme vb. gibi hastaneye yatış/uzun süreli ayakta tedavi gerektiren, uzun süreli artçil etkileri ifade eder.

*2: Hafif yaralanma; hastaneye yatış ya da uzun süreli ayakta tedavi gerektirmeyen yaralanmaları, yanıkları veya elektrik çarpmalarını ifade eder.

*3: Mala zarar verme binalar, ekipman, çiftlik hayvanları veya evcil hayvanlar vb. ile ilişkili geniş kapsamlı hasarı ifade eder.



UYARI



Kurulum Önlemleri


| | | | |
|----------------------------------|---|-------------|--|
| Kurulum talep edin | Yetkili bir satıcıdan veya kalifiye kurulum profesyonelinin bu ünitenin kurulumunu veya yeniden kurulumunu yapmasını isteyin. Kurulum için profesyonel bilgi ve beceriler gerekir. Kullanıcının uygun olmayan şekilde kurulum yapması yangına, elektrik çarpmasına veya yaralanmalara neden olabilir. | Zorunlu | Her zaman toprağa bağlayın. Yanlış topraklama elektrik çarpmasına neden olabilir. Elektriğe bağlamadan önce topraklama yapın. İş tüm yerel ve ulusal yönetmeliklere uygun olmalıdır. |
| Belirtilen ürünleri kullanın | Tarafımızdan belirlenen ısı kaynağı ürünlerini kullanın. Lütfen tarafımızdan belirlenen ısı kaynağı ürünlerini kullanın. Belirtilenlerden farklı ürünlerin kullanılması yangına, elektrik çarpmasına veya su sızıntısına neden olabilir. Ayrıca lütfen kurulum işleri için bir profesyonelle danışın. | Zorunlu | Elektrik işleri Kurulum Kılavuzu'na uygun olarak yetkili bir elektrikçi tarafından gerçekleştirilmelidir. İş tüm yerel ve ulusal yönetmeliklere uygun olmalıdır. Uygun olmayan iş yapılması, elektrik çarpmasına veya yangına neden olabilir. İş yapmadan önce, gücü kapattığınızdan emin olun. Aksi takdirde, elektrik çarpması meydana gelebilir. |
| Yasak | Grup kumandası İnternete bağlanamaz. Asla İnternete bağlamayın. İnternete bağlanmasından kaynaklanan hiçbir sorun için sorumluluk kabul etmeyeceğiz. Yalnızca yerel bir ağa bağlanabilir. | Yasak | Ürünü tüm yerel ve ulusal yönetmeliklerin gereklerini karşılamayan hiçbir elektrikli cihaza veya başka ekipman parçalarına bağlamayın. |

Kullanım Önlemleri




| | | | |
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| Yasak | Düğmeleri ıslak ellerle çalıştırmayın. Bunu yapılması elektrik çarpmasına veya arızaya neden olabilir. | Yasak | Grup kumandalarının ıslanmasına izin vermeyin. Merkezi kontrol ürünlerinin ıslanmamasına dikkat edin. Aksi takdirde, bir yangın, elektrik çarpması veya arıza meydana gelebilir. |
| Zorunlu | Anormal bir şey (yanık kokusu vb.) varsa gücü kapatın. Kullanmaya devam edilmesi yangına veya elektrik çarpmasına neden olabilir. Lütfen ürünü satın aldığınız satıcıya danışın. | Zorunlu | Belirtilenin dışında bir güç kaynağı kullanmayın. Belirtilenin dışında bir güç kaynağı kullanmak yangına veya arızaya neden olabilir. 100 VAC veya 200 VAC bir güç kaynağı kullanın. |



Yer Değiştirme ve Onarım Önlemleri


| | |
|--|---|
|  Yasak | Üniteyi modifiye etmeyin. Bir yangın veya elektrik çarpması meydana gelebilir. |
|  Yer değiştirme talep edin | Yetkili bir satıcıdan veya kalifiye bir kurulum profesyonelinden ısı kaynağı ürünlerin yerinin değiştirilmesini ve yeniden kurulumunun yapılmasını isteyin. Uygun olmayan şekilde kurulum yapılması yangına, elektrik çarpmasına veya yaralanmalara neden olabilir. |


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|  Talep | Lütfen onarım için üniteyi satın aldığınız satıcıya danışın. Hatalı onarım yangına veya elektrik çarpmasına neden olabilir. |
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⚠ DİKKAT**Kurulum Önlemleri**


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|--|--|
|  Kurulum yerini kontrol edin | Kurulumu yüksek nem oranına sahip veya sık titreşimlere maruz kalan bir yere yapmayın. Aksi takdirde bir arızaya neden olabilir. |
|  Kurulum yerini kontrol edin | Kurulumu parazit üretilen bir yere yapmayın. Aksi takdirde bir arıza meydana gelebilir. |
|  Kurulum yerini kontrol edin | Bu cihazı çocukların bulunabileceği yerlerde kullanmayın. |


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|  Kurulum yerini kontrol edin | Kurulumu doğrudan güneş ışığına maruz kalan veya bir ısı kaynağına yakın bir yere yapmayın. Aksi takdirde bir arızaya neden olabilir. |
|  Kurulum yerini kontrol edin | Kurulumu yanıcı gaz sızıntısı olabilecek bir yere yapmayın. Gaz sızıntısı olur ve ürünün etrafında gaz birikirse patlamaya neden olabilir. |

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|  Yasak | Kurulumu aşağıdaki konumlarda yapmayın. Yanıcı gaz sızıntısı olabilecek yerler. • Yüksek nem veya su bulunan yerler. • Tozlu yerler. • Doğrudan güneş ışığı alan yerler ve yüksek sıcaklıklara maruz kalan yerler. • Televizyonlar veya radyolardan 1 m mesafe içinde kalan yerler. • Dış mekanlar, tente altları veya yağmura ya da çiyeye maruz kalan diğer yerler. • Aşındırıcı gazlar veya tuz içeren dış ortam havasına maruz kalan yerler. • Sık titreşimlere maruz kalan yerler. |
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|  Zorunlu | Kablolama tesisatı için akım kapasitesinin doğru olduğundan emin olun. Aksi takdirde, elektrik kaçağı, ısı oluşumu, yangın vb. meydana gelebilir. Kablo tesisatı için belirtilen kabloları kullanın ve kabloları uygulanan dış kuvvetlerin terminal bağlantılarına uygulanmasını önlemek için bağlantıların sağlam yapıldığından emin olun. Aksi takdirde, bağlantı kesilmeleri, ısı oluşumu veya yangın meydana gelebilir. Güç kaynağının birincil tarafına bir devre kesici taktığınızdan emin olun. Örneğin, devre kesiciyi kontrol paneline takın. |
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Kullanım Önlemleri

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|  Yasak | Ürünü düşürmeyin veya güçlü darbeler uygulamayın. Aksi takdirde bir arızaya neden olabilir. |
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|  | Bakım veya muayene işlemlerinden önce, toprak kaçak kesiciyi kapatın. Aksi takdirde, yaralanma meydana gelebilir. |
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Bu üründe bir hata olması durumunda, ana güç kaynağını kapatın ve ürünü satın aldığınız satıcıya danışın.

Hatayı gidermeden ürünün kullanılmaya devam edilmesi yangına veya elektrik çarpmasına neden olabilir.

AEEE Yönetmeliğine Uygundur

Klimanıza ilişkin daha ayrıntili bilgiler için ürün tanıtım broşürlerine, gerektiğinde Alarko Carrier Yetkili Satıcı ve Servislerine ulaşabilmek için 444 0 128 numaralı Müsteri Danışma Hattımıza başvurabilirsiniz

Müşteri Notu

| | | | |
|--------------------------------------|------------------|----|-----|
| Model Adı | RBP-GC004TP-E | | |
| Kurulum Tarihi | Yıl | Ay | Gün |
| Birimi satın aldığınız satıcının adı | Telefon numarası | | |

Onarım vb. talep etmenizi gerektiren bir durum olması halinde, satın alma sırasında bu kısmı doldurmanız daha uygundur.

1 주의 사항

1-1 안전 주의 사항

사용자 및 다른 사람의 피해 및 재산상 손해를 방지하기 위해 반드시 따라야 하는 안전 주의 사항을 설명합니다.

"표시 설명"은 장치를 부정확하게 취급할 경우 발생할 수 있는 피해 또는 손상의 정도 분류를 설명하는 한편, "기호 설명"은 기호의 의미를 나타냅니다.

| 표시 설명 | 기호 설명 |
|--|---|
| <p> 경고</p> <p>"부정확하게 취급한 경우 사용자가 사망 또는 심각한 부상(*1)에 이를 수 있는 내용"을 나타냅니다.</p> | <p> 금지된 활동을 나타냅니다. 구체적으로 금지된 내용은 기호 내부 또는 주변에 그림 및/또는 글로 표시되어 있습니다.</p> |
| <p> 주의</p> <p>"부정확하게 취급한 경우 사용자가 가벼운 부상(*2)을 당하거나 재산상 손해(*3)를 입을 수 있는 내용"을 나타냅니다.</p> | <p> 반드시 따라야 하는 지침을 나타냅니다. 지침의 실제 내용은 기호 내부 또는 주변에 그림 및/또는 글로 표시되어 있습니다.</p> |

*1: 심각한 부상이란 실명, 부상, 화상(고온/저온), 감전, 골절 또는 중독 등과 같이 그 여파가 영속적이거나 입원/장기 외래 치료가 필요한 부상을 나타냅니다.

*2: 가벼운 부상이란 입원 또는 장기간의 외래 치료가 필요하지 않는 부상, 화상 또는 감전 등을 나타냅니다.



*3: 물적 손해란 건물, 설비, 가축, 애완동물 등과 관련된 포괄적인 손해를 나타냅니다.



! 경고

설치 주의 사항



| | | | |
|---------------|--|-----------|--|
| 설치 요청 | <p>공인 판매자 또는 공인 설치 전문가에게 장치를 설치 또는 재설치하도록 요청합니다. 설치하려면 전문 지식 및 기술이 있어야 합니다. 사용자가 부적합하게 설치할 경우, 화재, 감전 또는 부상을 초래할 수 있습니다.</p> | 의무 사항 | <p>항상 접지하십시오. 부적합하게 접지할 경우, 감전될 수 있습니다. 전원을 연결하기 전에 접지를 하십시오. 이 작업은 지역 및 국가 규정을 모두 만족시켜야 합니다.</p> |
| 지정된 제품 사용 | <p>당사에서 지정한 열원 제품을 사용하십시오. 당사에서 지정한 열원 제품을 사용해 주십시오. 지정된 제품을 사용하지 않을 경우, 화재, 감전 또는 누수를 초래할 수 있습니다. 또한, 설치 작업을 위한 전문가를 요청하십시오.</p> | 의무 사항 | <p>전기 작업은 설치 설명서에 따라 자격을 갖춘 전기 기술자가 실시해야 합니다. 이 작업은 지역 및 국가 규정을 모두 만족시켜야 합니다. 작업을 잘못 수행하면 감전으로 인해 화재가 발생할 수 있습니다. 작업을 수행하기 전에 전원을 끄십시오. 그렇지 않을 경우, 감전될 수 있습니다.</p> |
| 금지 사항 | <p>그룹 컨트롤러를 인터넷에 연결할 수 없습니다. 절대 인터넷에 연결하지 마십시오. 인터넷에 연결할 경우 발생할 수 있는 그 어떤 문제에 대해서도 당사는 책임지지 않습니다. 기업 내 정보 통신망에만 연결할 수 있습니다.</p> | 금지 사항 | <p>지역 및 국가의 모든 규정을 준수하지 않는 전기 제품 또는 기타 기기에는 연결하지 마십시오.</p> |


사용시 주의 사항

| | |
|--|---|
|  금지 사항 | 젖은 손으로 스위치를 조작하지 마십시오. 이럴 경우, 감전 또는 기기 고장이 발생할 수 있습니다. |
|  의무 사항 | 어떤 비정상적인 현상(타는 냄새 등)이 발생하는 경우, 전원을 끄십시오. 계속 사용할 경우, 화재 또는 감전이 발생할 수 있습니다. 제품을 판매한 판매자에 문의하십시오. |

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|  금지 사항 | 그룸 컨트롤러가 물에 젖지 않도록 하십시오. 중앙 제어용 제품이 물에 젖지 않도록 주의하십시오. 그렇지 않은 경우, 화재, 감전 또는 기기 고장이 발생할 수 있습니다. |
|  의무 사항 | 지정된 전원 공급 장치 이외의 다른 제품을 사용하지 마십시오. 지정된 전원 공급 장치 이외의 다른 제품을 사용할 경우, 화재나 기기 고장이 발생할 수 있습니다. 100 VAC 또는 200 VAC 전원 공급 장치를 사용하십시오. |




재배치 및 수리 주의 사항



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|---|---|
|  금지 사항 | 기기를 개조하지 마십시오. 화재 또는 감전이 발생할 수 있습니다. |
|  재배치 요청 | 공인 판매자 또는 자격을 갖춘 설치 전문가에게 열원 제품을 이동하여 재설치하도록 요청하십시오. 부적합하게 설치할 경우, 화재, 감전 또는 부상을 초래할 수 있습니다. |


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|  요청 | 제품을 구입한 판매자에게 수리를 요청하십시오. 수리를 잘못할 경우 화재 또는 감전이 발생할 수 있습니다. |
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 주의

설치 주의 사항



| | |
|---|--|
|  설치 장소 점검 | 습도가 높거나 진동이 자주 발생하는 장소에 설치하지 마십시오. 이럴 경우 기기 고장이 발생할 수 있습니다. |
|  설치 장소 점검 | 소음이 발생하는 장소에 설치하지 마십시오. 이럴 경우 오동작이 발생할 수 있습니다. |
|  설치 장소 점검 | 어린이가 있을 수 있는 장소에서는 이 제품을 사용하지 마십시오. |


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|  설치 장소 점검 | 직사광선이 비추는 장소 또는 열원 근처에 설치하지 마십시오. 이럴 경우 기기 고장이 발생할 수 있습니다. |
|  설치 장소 점검 | 가연성 기체가 누출되는 장소에 설치하지 마십시오. 제품 근처에서 기체가 누출되고 축적되는 경우, 제품이 연소될 수 있습니다. |

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|  금지 사항 | <p>다음 장소에 설치하지 마십시오. 가연성 기체가 누출될 수 있는 장소.</p> <ul style="list-style-type: none"> • 습도가 높거나 물이 있는 장소. • 먼지가 많은 장소. • 직사광선이 비추고 온도가 높은 장소. • 텔레비전 또는 라디오와 1m 이내인 장소. • 실외, 차양 아래, 그 외에 비와 이슬에 노출되는 장소. • 부식성 또는 염분성 기체가 포함된 외부 공기에 노출되는 장소. • 진동이 잦은 장소. |
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|  의무 사항 | <p>배선의 경우, 전류 용량을 정확하게 유지하십시오. 그렇지 않을 경우, 누전, 열, 화재 등이 발생할 수 있습니다. 배선의 경우, 규정된 케이블을 사용하고 보안 연결을 하여 케이블의 외력이 터미널 연결에 적용되지 않도록 하십시오. 그렇지 않으면, 단전, 열 또는 화재가 발생할 수 있습니다. 전원 공급장치의 1단에 차단기를 설치하도록 하십시오. 예를 들어, 제어판에 설치하도록 하십시오.</p> |
|--|--|

사용시 주의 사항

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|  금지 사항 | <p>제품을 떨어뜨리거나 강한 충격을 받지 않도록 하십시오. 이럴 경우 기기 고장이 발생할 수 있습니다.</p> |
|  | <p>유지보수 또는 점검을 하기 전에 누전 차단기를 끄십시오. 그렇지 않은 경우, 부상이 발생할 수 있습니다.</p> |

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|  | <p>이 제품에 오류가 발생하는 경우, 주 전원 공급장치의 전원을 끄고 제품을 구입한 판매자에게 문의하십시오. 오류를 제거하지 않고 제품을 지속적으로 사용할 경우, 화재 또는 감전이 발생할 수 있습니다.</p> |
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1 Предпазни мерки

1-1 Предпазни мерки за безопасност

Обяснение на предпазните мерки за безопасност, които трябва да спазвате, за да се предотврати нанасяне на вреда на потребителя и на други лица, както и на щети на имущество.

„Описание на дисплея“ дава обяснение на класификацията на степента на нанасяне на вреда, което може да възникне при неправилна работа с уреда, а „Описание на символа“ показва смисъла на символите.

Описание на дисплея



ПРЕДУПРЕЖДЕНИЕ

Показва „Съдържание, за което се очаква да доведе до смърт или сериозно нараняване (*1) на потребителя при неправилна работа“.



ВНИМАНИЕ

Показва „Съдържание, за което се очаква да доведе до леко нараняване (*2) на потребителя или щети на имущество (*3) при неправилна работа“.

Описание на символа



Показва забранени действия. Конкретно забранените действия са показани с илюстрация и/или текст, в или близо до символа.



Показва инструкции, които трябва да се спазват. Действителните съдържания на инструкциите са показани с илюстрация и/или текст, в или близо до символа.

*1: Сериозно нараняване се отнася за продължителни последствия като слепота, нараняване, изгаряния (от висока или от ниска температура), електрически удар, счупване на кост, отравяне и подобни, които изискват настаняване в болница / продължително амбулаторно лечение.

*2: Леко нараняване се отнася за наранявания, изгаряния или електрически удар, които не изискват настаняване в болница или продължително амбулаторно лечение.



*3: Щети на имущество се отнася за значителни щети, свързани със здания, оборудване, добитък или домашни животни, и подобни.

! ПРЕДУПРЕЖДЕНИЕ

Предпазни мерки при монтаж

| | | | |
|--|--|------------------|--|
| Изисква монтаж | <p>Възложете на упълномощен доставчик или на квалифициран професионален монтажник да монтира или демонтира този уред. Монтажът изисква професионални познания и умения. Неправилният монтаж, направен от потребителя, може да предизвика пожар, електрически удар или нараняване.</p> | Задължете | <p>Винаги го свързвайте към заземяването. Неправилното заземяване може да е причина за електрически удар. Преди да свържете захранването, изпълнете заземяването. Дейността трябва да отговаря на всички изисквания на местните закони и нормативни актове.</p> |
| Използвайте специфицираните продукти | <p>Използвайте в качеството на източник на топлина продукти, конструирани от нас. Моля, използвайте в качеството на източник на топлина продукти, конструирани от нас. Използването на други продукти освен специфицираните може да предизвика пожар, електрически удар или изтичане на вода. Също така, възложете монтажните дейности на професионалист.</p> | Задължително | <p>Дейностите по електрическото свързване трябва да бъдат извършени от квалифициран електротехник съгласно Ръководството за монтаж. Дейността трябва да отговаря на всички изисквания на местните закони и нормативни актове. Неправилната експлоатация може да е причина за електрически удар или пожар. Преди да извършвате технически работи, непременно изключвайте захранването. В противен случай има опасност от електрически удар.</p> |
| Забранен | <p>Груповият контролер не може да се свързва към Интернет. Никога не го свързвайте към Интернет. Ние няма да поемем никаква отговорност за проблеми, предизвикани от свързване към Интернет. Възможно е свързването му само към локална мрежа.</p> | Забранен | <p>Не го свързвайте към каквито и да било електрически уреди или други части от оборудване, които не съответстват на всички изисквания на местните закони и нормативни актове.</p> |



Предпазни мерки при работа


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|  Забранен | Не работете с превключвателите с мокри ръце. Това може да е причина за електрически удар или повреда. |
|  Задължително | Изключете захранването, ако ситуацията не е нормална (мирис на изгоряло и подобни). Ако работата продължи, възможно е да се стигне до електрически удар. Обърнете се към доставчика, от който сте закупили продукта. |

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|  Забранен | Не допускайте намокряне на груповите контролери. Внимавайте да не допуснете намокряне на груповите контролери. В противен случай може да възникне пожар, електрически удар или повреда. |
|  Задължително | Не използвайте друго захранване освен специфицираното. Ако се използва друго захранване освен специфицираното, възможно е да възникне пожар или повреда. Използвайте захранване за 100 V променлив ток или 200 V променлив ток. |




лно



Предпазни мерки при преместване и ремонт


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|  Забранен | Не модифицирайте уреда. Възможно е да възникне пожар или електрически удар. |
|  Изискване при преместване | Възложете на упълномощен доставчик или на квалифициран професионален монтажник да премести и да монтира отново устройствата - източници на топлина. Неправилният монтаж може да предизвика пожар, електрически удар или нараняване. |

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|  Изискване | За ремонт се обърнете към доставчика, от който сте закупили продукта. Некачествен ремонт може да е причина за пожар или електрически удар. |
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 **ВНИМАНИЕ****Предпазни мерки при монтаж**



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|--|---|
|  Проверете мястото за монтаж | Не инсталирайте уреда на място с висока влажност, или на място с чести вибрации. Това може да е причина за повреда. |
|  Проверете мястото за монтаж | Не инсталирайте на място, където се генерира шум. Това може да причини неизправност. |
|  Проверете мястото за монтаж | Не използвайте това устройство на места, на които може да има деца. |


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|  Проверете мястото за монтаж | Не инсталирайте уреда на място, изложено на пряка слънчева светлина или близо до източник на топлина. Това може да е причина за повреда. |
|  Проверете мястото за монтаж | Не инсталирайте уреда на място, на което има опасност от изтичане на запалими газове. Ако около уреда изтече и се натрупа газ, може да се предизвика пожар. |

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|  Забранен | <p>Не го монтирайте на следните места.</p> <ul style="list-style-type: none"> • Не го монтирайте на място, където има опасност от изтичане на запалим газ. • Места с висока влажност, или вода. • Места с прах. • Места с пряка слънчева светлина и места, подложени на високи температури. • Места на разстояние до 1 метър до телевизори или радиоапарати. • На открито под навеси или на други места, изложени на действието на дъжд и роса. • Места, изложени на действието на външен въздух, съдържащ корозивни газове или соленост. • Места, често подлагани на вибрации. |
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|  Задължително | <p>За свързването се уверете, че съществуващият капацитет е правилен.</p> <p>В противен случай може да възникне утечка на ток, генериране на топлина, пожар и подобни.</p> <p>За свързването използвайте предписаните кабели и осигурете надеждна връзка, така че да не се допуска външното усилие от кабелите да се прилага към контактните изводи.</p> <p>В противен случай може да възникне прекъсване, генериране на топлина или пожар.</p> <p>Непременно инсталирайте прекъсвач в първичната страна на електрозахранването. Например, инсталирайте го в панела за управление.</p> |
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Предпазни мерки при работа

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|  Забранен | <p>Не изпускайте продукта и го пазете от силни удари.</p> <p>Това може да е причина за повреда.</p> |
|  | <p>Преди поддръжка или инспектиране, изключете прекъсвач за утечка към земя.</p> <p>В противен случай може да се причини нараняване.</p> |

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|  | <p>В случай на неправилно функциониране на този продукт, изключете електрозахранването и се обърнете към доставчика, от който сте закупили продукта.</p> <p>Ако работата продължи без да се отстрани неизправността, възможно е да се причини пожар или електрически удар.</p> |
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1 Mjere opreza

1-1 Sigurnosne mjere opreza

Sadržavaju objašnjenje sigurnosnih mjera opreza kojih se morate pridržavati kako biste spriječili ozljedu korisnika i drugih osoba i materijalnu štetu.

„Opis zaslona” sadržava objašnjenje stupnjevanja ozljeda ili oštećenja do kojih može doći ako se jedinicom nepravilno rukuje, dok „Opis simbola” označava značenje simbola.

Opis zaslona



UPOZORENJE

Označava radnje čija su očekivana posljedica smrt ili teške ozljede (*1) korisnika u slučaju nepravilna rukovanja.



OPREZ

Označava radnje čija su očekivana posljedica lakše ozljede (*2) korisnika ili materijalna šteta (*3) u slučaju nepravilna rukovanja.

Opis simbola



Označava zabranjene radnje. Posebno zabranjene radnje označene su slikom i/ili tekstom na simbolu ili u njegovoj blizini.



Označava upute koje morate slijediti. Konkretni sadržaj uputa označen je slikom i/ili tekstom na simbolu ili u njegovoj blizini.

*1: Teška ozljeda odnosi se na dugotrajne posljedice poput sljepoće, ozljede, opekline (zbog visoke/niske temperature), strujnog udara, loma kostiju, trovanja i sl., kao i na ozljede za koje je potrebno bolničko ili dugotrajno ambulantno liječenje.

*2: Lakša ozljeda odnosi se na ozljede, opekline, strujne udare i sl. za koje nije potrebno ni bolničko ni dugotrajno ambulantno liječenje.

*3: Materijalna šteta odnosi se na štetu nanesenu građevinama, opremi, stoci, kućnim ljubimcima itd.







UPOZORENJE

Mjere opreza pri instalaciji



| | | | |
|---|---|---------------|--|
| Zatražite instalaciju | <p>Zamolite ovlaštenog trgovca ili kvalificiranog instalatera da vam (ponovno) instaliraju jedinicu. Za instalaciju su potrebne profesionalne vještine i znanje. Posljedice korisnikove nepravilne instalacije mogu biti požar, strujni udar ili ozljeda.</p> | Obvezatno | <p>Uvijek uzemljite. Zbog nepravilna uzemljenja može doći do strujnog udara. Uzemljite prije priključivanja na struju. Radovi moraju zadovoljavati sve lokalne i nacionalne propise.</p> |
| Upotrebljavajte propisane proizvode | <p>Upotrebljavajte proizvode za izvor topline koje smo mi odredili. Molimo vas da upotrebljavate proizvode za izvor topline koje smo mi odredili. Ako upotrebljavate neke druge proizvode, može doći do požara, strujnog udara ili curenja vode. Osim toga, zamolite profesionalca da obavi instalaciju.</p> | Obvezatno | <p>Električarske radove mora izvesti kvalificirani električar u skladu s priručnikom za instalaciju. Radovi moraju zadovoljavati sve lokalne i nacionalne propise. Zbog nepravilnih radova može doći do strujnog udara ili požara. Prije nego što započnete s radom, morate isključiti napajanje. Inače može doći do strujnog udara.</p> |
| Zabranjen | <p>Grupni upravljač ne smije se spojiti na internet. Nikad ga nemojte spajati na internet. Ne preuzimamo nikakvu odgovornost za probleme prouzročene njegovim spajanjem na internet. Smije se spajati samo na lokalnu mrežu.</p> | Zabranjen | <p>Nemojte spajati ni na kakve električne uređaje ni na drugu opremu koja nije u skladu sa svim lokalnim i nacionalnim propisima.</p> |


Mjere opreza pri upotrebi

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|--|--|
|  Zabranjen | Nemojte dirati prekidače mokrim rukama. U protivnome može doći do strujnog udara ili kvara. |
|  Obvezatno | Isključite napajanje ako nešto nije u redu (npr. ako namirišete da je nešto zagorjelo). Nastavite li upotrebljavati jedinicu, može doći do požara ili strujnog udara. Obratite se trgovcu od kojeg ste kupili proizvod za pomoć. |




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|--|--|
|  Zabranjen | Ne dajte da se grupni upravljači smoče. Pazite da se grupni upravljači ne smoče. Inače može doći do požara, strujnog udara ili kvara. |
|  Obvezatno | Nemojte upotrebljavati nijedno drugo napajanje osim propisanog. Ako upotrebljavate napajanje koje nije propisano, može doći do požara ili kvara. Upotrebljavajte napajanje od 100 ili 200 VAC. |



Mjere opreza pri premještanju i popravku



| | |
|---|--|
|  Zabranjen | Nemojte preinačavati jedinicu. Moglo bi doći do požara ili strujnog udara. |
|  Zatražite premještanje | Zamolite ovlaštenog trgovca ili kvalificiranog instalatera da premjeste i ponovno instaliraju uređaje koji služe kao izvor topline. Posljedice nepravilne instalacije mogu biti požar, strujni udar ili ozljeda. |

| | |
|--|--|
|  Zatražite | Obratite se trgovcu od kojeg ste kupili jedinicu za popravak. Zbog nepravilna popravka može doći do požara ili strujnog udara. |
|--|--|




 **OPREZ****Mjere opreza pri instalaciji**

| | |
|---|---|
|  Provjerite mjesto za instalaciju | Nemojte instalirati na mjestu s visokom vlagom u zraku ili čestim vibracijama. U protivnome može doći do kvara. |
|  Provjerite mjesto za instalaciju | Nemojte instalirati na bučnom mjestu. U protivnome može doći do neispravna rada. |
|  Provjerite mjesto za instalaciju | Ne koristite ovaj uređaj na mjestima gdje bi mogla biti prisutna djeca. |

| | |
|---|---|
|  Provjerite mjesto za instalaciju | Nemojte instalirati na mjestu izloženu izravnoj Sunčevoj svjetlosti ili blizu izvora topline. U protivnome može doći do kvara. |
|  Provjerite mjesto za instalaciju | Nemojte instalirati na mjestu na kojem može doći do ispuštanja zapaljiva plina. Ako plin ispušta i nakuplja se oko proizvoda, može se zapaliti. |

| | | | |
|--|--|--|--|
|  Zabranjen | <p>Nemojte instalirati na sljedećim mjestima:</p> <ul style="list-style-type: none"> • mjestima na kojima može doći do ispuštanja zapaljiva plina • mjestima s visokom vlagom u zraku ili vodom • prašnjavim mjestima • mjestima izloženim izravnoj Sunčevoj svjetlosti i mjestima izloženim visokim temperaturama • mjestima udaljenim manje od metra od televizora ili radija • vani, ispod nadstrešnice ili drugim mjestima izloženim kiši i rosi • mjestima izloženim vanjskom zraku koji sadržava korozivne plinove ili sol • mjestima s čestim vibracijama. |  Obvezatno | <p>Kad je riječ o ožičenju, uvjerite se da je strujni kapacitet dobar. Inače može doći do propuštanja struje, zagrijavanja, požara itd.</p> <p>Kad je riječ o ožičenju, upotrebljavajte propisane kabele i osigurajte čvrst spoj kako vanjske sile kabela ne bi djelovale na priključke. Inače bi moglo doći do odspajanja, zagrijavanja ili požara.</p> <p>Svakako instalirajte prekidač na primarnu stranu napajanja. Na primjer, instalirajte ga na upravljačku ploču.</p> |
|--|--|--|--|

Mjere opreza pri upotrebi

| | | | |
|--|--|---|--|
|  Zabranjen | <p>Nemojte ispustiti proizvod iz ruku niti ga silovito udarati. U protivnome može doći do kvara.</p> |  | <p>Ako otkrijete grešku na proizvodu, isključite glavno napajanje i obratite se trgovcu od kojeg ste kupili proizvod za pomoć. Nastavite li se koristiti proizvodom prije nego što ispravite grešku, može doći do požara ili strujnog udara.</p> |
|  | <p>Prije održavanja ili pregleda isključite prekidač propuštanja uzemljenja. Inače se možete ozlijediti.</p> | | |

1 Opatření

1-1 Bezpečnostní opatření

Definuje bezpečnostní opatření, která musíte dodržovat, abyste zabránili poškození uživatele a dalších osob a poškození majetku.

„Popis displeje“ popisuje klasifikaci stupně újmy nebo poškození, které může nastat při nesprávném zacházení s jednotkou, zatímco „Popis symbolů“ uvádí význam symbolů.

Popis displeje



VAROVÁNÍ

Označuje „Obsah, u kterého lze očekávat, že případná nesprávná manipulace bude mít za následek smrt nebo vážné zranění (*1) uživatele“.



UPOZORNĚNÍ

Označuje „Obsah, u kterého lze očekávat, že případná nesprávná manipulace bude mít za následek lehké zranění (*2) uživatele nebo poškození majetku (*3)“.

Popis symbolů



Označuje zakázané činnosti. Specificky zakázaný obsah je označen obrázkem a/nebo textem v symbolu nebo v jeho blízkosti.



Označuje pokyny, které je třeba dodržovat. Skutečný obsah pokynů je označen obrázkem a/nebo textem v symbolu nebo v jeho blízkosti.

*1: Vážným zraněním se rozumí trvalé následky, jako je slepota, zranění, popáleniny (způsobené vysokou / nízkou teplotou), úraz elektrickým proudem, zlomenina kosti nebo otrava atd. a zranění, která vyžadují hospitalizaci/dlouhodobou ambulantní léčbu.

*2: Lehkým zraněním se rozumí zranění, popáleniny nebo úrazy elektrickým proudem atd., které nevyžadují hospitalizaci nebo dlouhodobou ambulantní léčbu.

*3: Poškození majetku označuje rozsáhlé škody související s budovami, vybavením, zvířatech nebo domácích mazlíčcích atd.

VAROVÁNÍ




Opatření při instalaci

| | | | |
|--------------------------------|--|--------------|---|
| Požádejte o instalaci | <p>Požádejte autorizovaného prodejce nebo kvalifikovaného instalačního technika o instalaci nebo přeinstalaci této jednotky. Instalace vyžaduje odborné znalosti a dovednosti. Nesprávná instalace uživatelem může způsobit požár, úraz elektrickým proudem nebo zranění.</p> | Povinné | <p>Vždy uzemněte. Nesprávné uzemnění může způsobit úraz elektrickým proudem. Před zapojením napájení proveďte uzemnění. Práce musí odpovídat veškerým místním a národním předpisům.</p> |
| Používejte určené produkty | <p>Používejte jako zdroj tepla námi určené produkty. Používejte jako zdroj tepla námi určené produkty. Použití jiných než specifikovaných produktů může způsobit požár, úraz elektrickým proudem nebo únik vody. Požádejte také o instalaci odborníka.</p> | Povinné | <p>Elektrické práce musí provést kvalifikovaný technik v souladu s instalační příručkou. Práce musí odpovídat veškerým místním a národním předpisům. Neodborná práce může způsobit úraz elektrickým proudem nebo požár. Před provedením práce nezapomeňte vypnout napájení. Jinak může dojít k úrazu elektrickým proudem.</p> |
| Zakázáno | <p>Skupinový ovladač nelze připojit k internetu. V žádném případě jej nepřipojujte k internetu. Neneseme žádnou odpovědnost za jakékoli problémy způsobené připojením k internetu. Může být připojen pouze k místní síti.</p> | Zakázáno | <p>Nepřipojujte k žádným elektrickým spotřebičům nebo jinému vybavení, které nevyhovuje veškerým místním a národním předpisům.</p> |

Opatření při používání








| | | | |
|--------------|---|--------------|--|
| Zakázáno | <p>Neovládejte spínače mokřima rukama. Mohlo by dojít k úrazu elektrickým proudem nebo selhání.</p> | Zakázáno | <p>Zabraňte zvlhnutí skupinových ovladačů. Dávejte pozor, aby skupinové ovladače nenavlhly. V opačném případě může dojít k požáru, úrazu elektrickým proudem nebo selhání.</p> |
| Povinné | <p>V případě čehokoli neobvyklého (zápach spáleniny atd.) vypněte napájení. Pokračování v používání může způsobit požár nebo úraz elektrickým proudem. Obráťte se na prodejce, u kterého jste výrobek zakoupili.</p> | Povinné | <p>Nepoužívejte jiný než specifikovaný zdroj napájení. Použití jiného než specifikovaného zdroje napájení může způsobit požár nebo selhání. Použijte napájecí zdroj 100 VAC nebo 200 VAC.</p> |

Opatření pro přemístění a opravy




| | | | |
|---|---|--|---|
|  Zakázáno | Jednotku neupravujte. Mohlo by dojít k požáru nebo úrazu elektrickým proudem. |  Požádejte | Požádejte o opravu prodejce, u kterého jste jednotku zakoupili. Nesprávná oprava může způsobit požár nebo úraz elektrickým proudem. |
|  Požádejte o přemístění | Požádejte autorizovaného prodejce nebo kvalifikovaného instalačního technika, aby přemístil a znovu nainstaloval zařízení zdroje tepla. Nesprávná instalace může způsobit požár, úraz elektrickým proudem nebo zranění. | | |

 **UPOZORNĚNÍ**

Opatření při instalaci

| | | | |
|---|--|---|---|
|  Zkontrolujte místo instalace | Neinstalujte na místo s vysokou vlhkostí nebo na místo s častými vibracemi. V opačném případě může dojít k selhání. |  Zkontrolujte místo instalace | Neinstalujte na místo vystavené přímému slunečnímu záření nebo blízko zdroje tepla. V opačném případě může dojít k selhání. |
|  Zkontrolujte místo instalace | Neinstalujte na místo, kde vzniká hluk. Mohlo by dojít k poruše. |  Zkontrolujte místo instalace | Neinstalujte na místo, kde může unikat hořlavý plyn. Pokud plyn uniká a hromadí se kolem výrobku, může způsobit vznícení. |
|  Zkontrolujte místo instalace | Nepoužívejte tento přístroj v místech, kde mohou být přítomny děti. | | |
|  Zakázáno | Neinstalujte na následujících místech. <ul style="list-style-type: none"> • Místa, kde může unikat hořlavý plyn. • Místa s vysokou vlhkostí nebo přítomností vody. • Prašná místa. • Místa na přímém slunci a místa vystavená vysokým teplotám. • Místa do 1 m od televizorů nebo rádií. • Venku, pod markýzami nebo na jiných místech vystavených dešti a rose. • Místa vystavená venkovnímu vzduchu obsahujícímu korozivní plyny nebo sůl. • Místa s častými vibracemi. |  Povinné | Zkontrolujte správnou proudovou kapacitu kabeláže. V opačném případě může dojít k úniku elektrického proudu, zahřívání, požáru atd. Pro kabeláž použijte předepsané kabely a zajistěte bezpečné připojení tak, aby vnější síla kabelů nepůsobila na svorkové spoje. V opačném případě může dojít k odpojení, zahřívání nebo požáru. Nezapomeňte nainstalovat jistič na primární stranu napájecího zdroje. Nainstalujte jej například do ovládacího panelu. |

Opatření při používání

| | | | |
|---|---|---|--|
|  Zakázáno | Zabraňte pádu produktu a nevystavujte jej silným nárazům. V opačném případě může dojít k selhání. |  | V případě chyby v tomto produktu vypněte hlavní napájení a obraťte se prodejce, u kterého jste produkt zakoupili. Pokračování v provozu produktu bez odstranění chyby může způsobit požár nebo úraz elektrickým proudem. |
|  | Před údržbou nebo kontrolou vypněte jistič svodového proudu. V opačném případě může dojít ke zranění. | | |

2 Description of terms

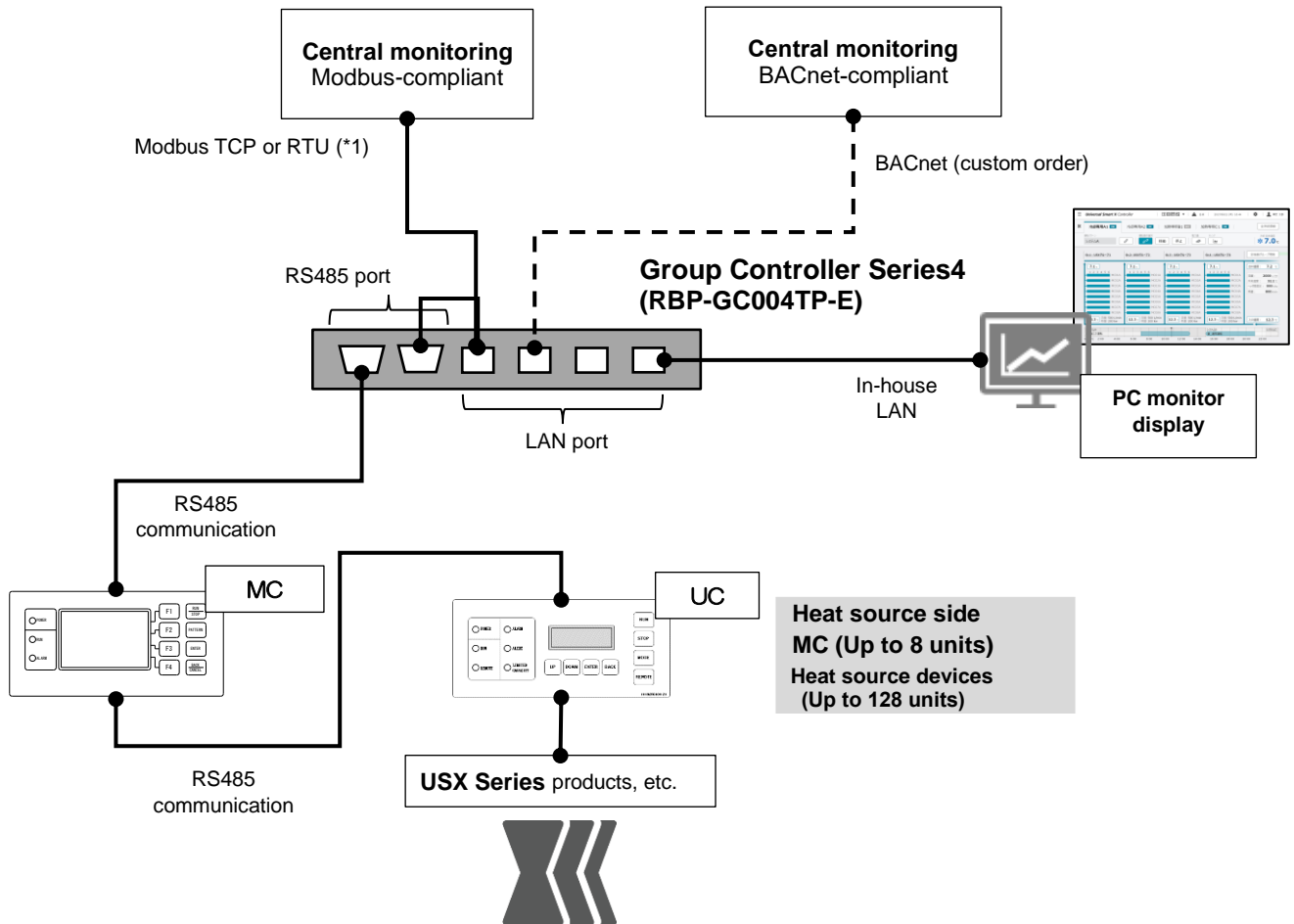
Terms used in this manual are listed below.

| Term | Abbreviation | Description |
|--------------------------|--------------|--|
| Unit controller | UC | A controller that controls the refrigeration cycles built into each heat source device. |
| Module controller | MC | A controller built into a representative heat source device that connects multiple UCs together and controls them as a single group. |
| Group controller | GC | It refers to a controller that manages the Universal Smart X Series via MC mounted in a representative product of the Universal Smart X Series. |
| Heat source device group | Device GR | A group of heat source devices belonging to the same system and the same priority; a minimum unit on which a GC performs start-stop control. |
| Config. pattern | — | A pattern for registering and managing setting items for the entire GC (allocation of each UC, sensor settings, interlock output, and heat source-air conditioner interlock). A GC can have only one config. pattern. The config. pattern is used to change the system to which heat source devices belong. |
| Setting pattern | — | A pattern for registering and managing setting items for each system (such as operation mode, set temperature, demand value, and priority). Each system can have only one setting pattern. The setting pattern is used to change the control setting values for that system (such as startup priority). |

3 Overview of Group Controller

3-1 System configuration

Using communication functions, this device (Group Controller Series4) controls heat source devices, collects data, and sends data to a high-order control system, such as a central monitoring system. It also performs operation management on heat source devices via MCs.



*1: Must be a Modbus TCP and RTU protocol where a central monitoring system and an air conditioning management controller are masters

Figure 1 System configuration with Group Controller Series4

Devices that can be connected to this device are listed in the table below.

| | Model name | Connectability | Remark |
|-------------|---------------------|----------------|--------|
| Heat source | USX1-3 | ○ | Note 1 |
| | USX4 | ○ | |
| | EDGE | ○ | Note 1 |
| | EDGE+ | ○ | |
| | EDGE32 | ○ | |
| | EDGE2 | ○ | |
| | EDGE32-2 | ○ | |
| | CAONS700 | – | |
| | Heat Recovery CAONS | – | |

Notes

Note 1: Restricted in Demand, as well as config. pattern and setting pattern management.

Note 2: Displayed values are estimated values as calculated using sensors in devices and their values. Depending on the settings and the operational status, they may differ from actual values.

Note 3: Operations are possible from both GC main unit and PC monitor, but the operation performed last will be given priority. We shall not guarantee the operation if multiple PC monitors are connected.

3-2 Function List

A function list is provided below.

| No | | Function | Description |
|----|---|---|---|
| 1 | Number of units that can be managed and connected | Number of heat source systems managed | Up to 16 systems (8 MCs × 2 systems) |
| 2 | | Number of device GRs managed | Up to 16 GRs (8 MCs × 2 GRs) |
| 3 | | Number of MCs connected | Up to 8 |
| 4 | | Number of UCs connected | Up to 128 (16 UCs × 8 MCs) |
| 5 | Operation status display | System-by-system status | Displays a list of status values for each heat source system. (See 8-4 for details.) |
| | | Device GR status | Displays a list of status values of device GRs. (See 8-5 for details.) |
| 7 | | MC status | Displays a list of status values of MCs. (See 8-6 for details.) |
| 8 | | UC status | Displays a list of status values of UCs. (See 8-7 for details.) |
| 9 | | Trend display | Displays various trend graphs. (See 8-8 for details.) |
| 10 | | Energy consumption display | Displays a graph of consumption for each energy type. (See 8-9 for details.) Standard: PowerSupport |
| 11 | | Failure history display | Displays a failure history list. (See 8-10 for details.) |
| 12 | Operate | Chiller Monitor | GC and heat source system operation Demand operation Configuration-by-configuration and system-by-system setting pattern operation Schedule ON/OFF operation |
| 13 | Various control functions | Config. pattern setting | Sets config. pattern (allocation of each UC, etc.) (up to 8 patterns/GC) (See 3-3 for details.) |
| 14 | | Allocation of each UC | Sets the allocation of each UC to a device GR |
| 15 | | Sensor setting | Sets an MC system for obtaining supply and return water temperatures, flows, etc. |
| 16 | | Interlock | Sets interlock |
| 17 | | Setting pattern (Note 1) | Sets the setting patterns (control setting values) for each heat source system (up to 8 patterns/system) |
| 18 | | PST | Sets the set temperatures for each heat source system |
| 19 | | Demand (Note 2) | Sets the demand current, load ratio, rated power, and power consumption ratios, as well as the power Demand levels 1 to 3 |
| 20 | | Group control | Performs group control for each heat source system Priorities that can be registered: Up to priority 4 |
| 21 | | Setting pattern switching | Switches between setting patterns according to load side heat capacity, load side flow, and outside air temperature, and changes control setting values |
| 22 | | Schedule Settings | Master schedules (weekly schedules: 5 and special day schedules: 5) Actual schedule (most recent 7 days) |
| 23 | Control target setting | Displays the monthly control target for energy consumption and reflects it in the energy consumption display Standard: PowerSupport with a custom order: Gas, oil, and steam | |
| 24 | Other setting | DN code settings | Sets various setting values |
| 25 | | Input/output (I/O) settings | Sets external input items |
| 26 | | Time settings | Sets the date and time to apply to the GC |
| 27 | | Language switching | Sets the language used |
| 28 | Maintenance | Cleaning mode | Function to lock screen operation during display cleaning |
| 29 | | Reset failure history for GC | Initialises GC failure history data |
| 30 | | Password setting | Sets an administrator password |
| 31 | | PT code settings | Sets various setting values |
| 32 | | Product information display | Displays the inquiry number and the software number |
| 33 | Others | Run data save | Enables you to save run data to main unit SSD |
| 34 | | Modbus function | See the Toshiba Carrier Modbus Specifications |
| 35 | | BACnet function | See the Toshiba Carrier BACnet Specifications |
| 36 | | Monitor display and operation on PC | Enables you to connect a PC and display the GC status on the screen and operate it |

Notes


Note 1: System-by-system setting patterns can be operated only when an RBP-GC004TP-E -compliant MC is connected. When a non-compliant MC is connected, system-by-system setting patterns will be the same as config. patterns.

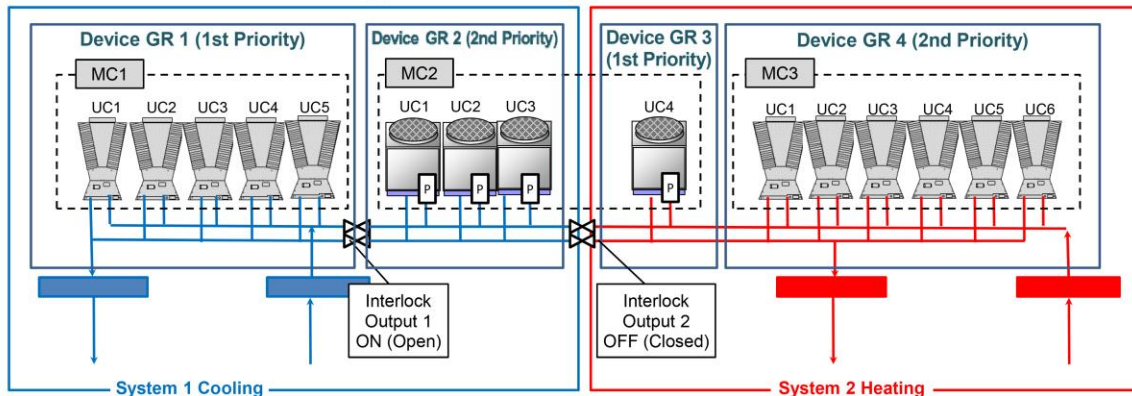
Note 2: Depending on the MC and UC software versions, function restrictions may be imposed.

3-3 Function to change the systems to which devices belong with config. patterns

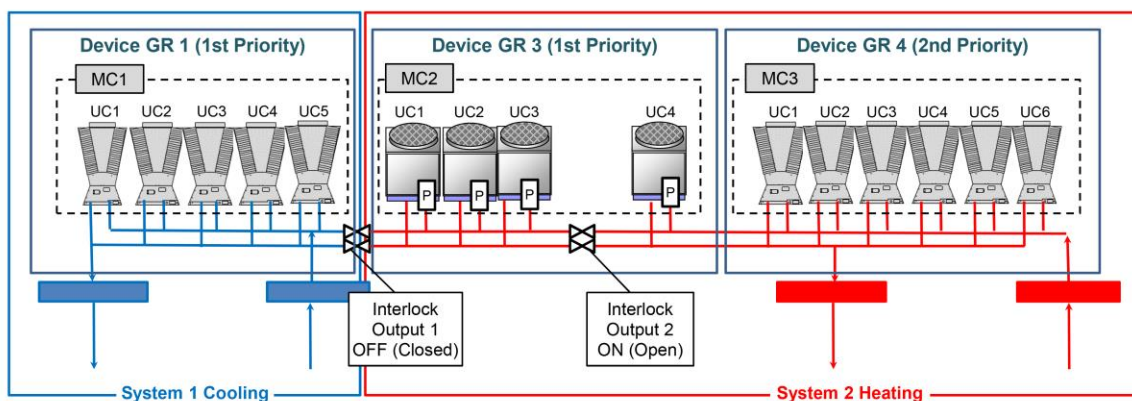
If there are multiple systems, this function enables you to change the facility capacity through the flexible use of devices between systems by specifying the heat source device groups (device GRs) (Note 1) to which the devices belong.

The following is an example in which the facility capacity is changed from priority on cooling to priority on heating by changing the number of modules registered in each of device GR 2 and device GR 3 and the opening and closing of switching valves, using config. patterns 1 and 2.

Config. pattern 1: Cooling priority  : Pump module kit



Config. pattern 2: Heating Priority



Notes

Note 1: Note the following when registering device GRs.

- ① UCs that belong to a single MC can be divided into 2 device GRs.
- ② To divide UCs that belong to a single MC, the UC numbers must be consecutive.
- ③ Two device GRs divided within a single MC cannot belong to the same load system.

3-4 Modbus-compliant

This product complies with Modbus RTU and TCP.

Various types of information about connected controllers can be monitored in a high-order instrumentation system through communication.

Contact us for details of communication specifications, data items, data addresses, etc.

3-5 BACnet-compliant

This product complies with BACnet.

Various types of information about connected controllers can be monitored in a high-order instrumentation system through communication.

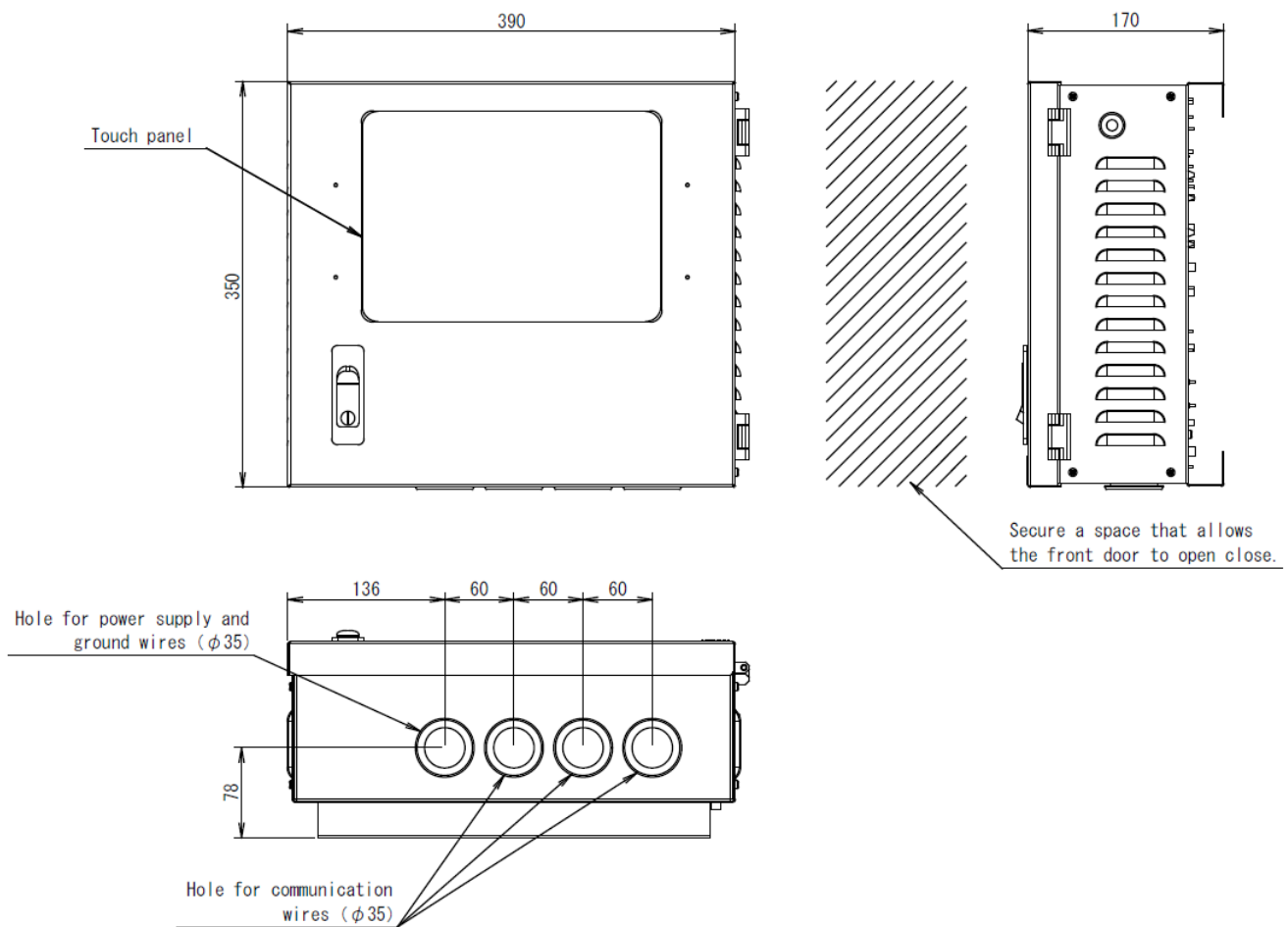
Contact us for details of communication specifications, data items, etc.

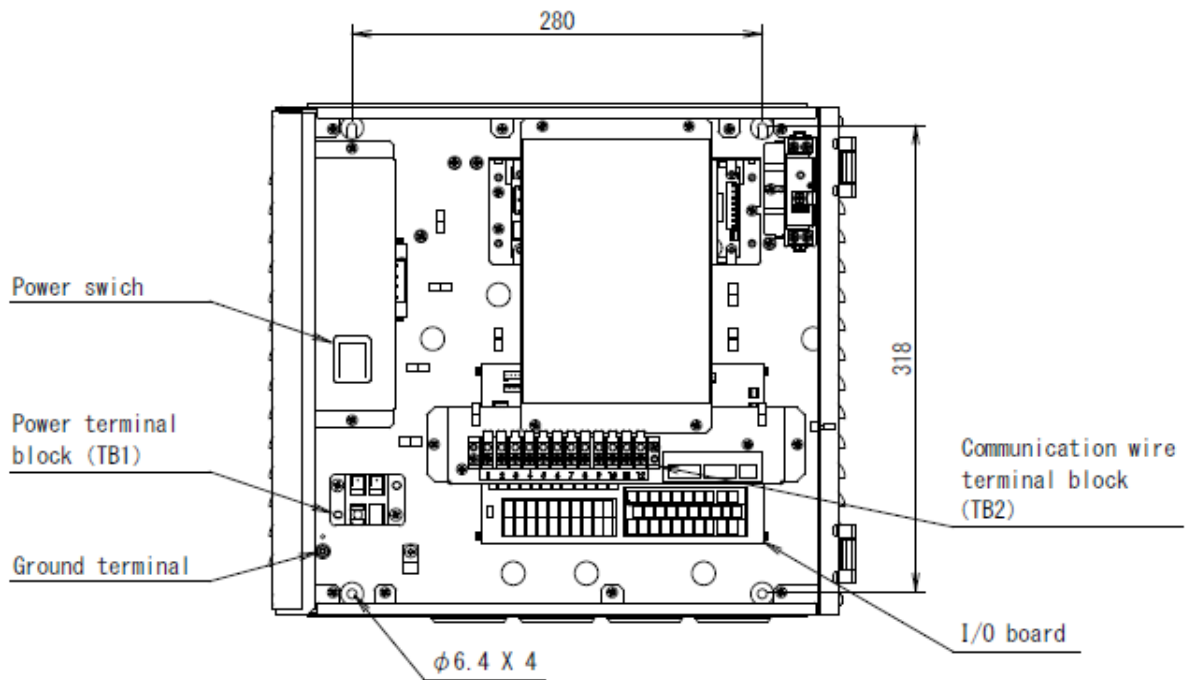
3-6 Hardware specifications and outline drawings

[Specifications]

| No. | Item | Condition for use | Remark |
|-----|-----------------------------|--|-------------------------------|
| 1 | Power supply | Single-phase 100 to 240 VAC, 50/60 Hz | — |
| 2 | Power consumption | 50W | — |
| 3 | Ambient temperature | 0.0 to 50.0 °C | — |
| 4 | Ambient humidity | 80%RH or less | No condensation |
| 5 | Outside dimensions | 390 (W) × 350 (H) × 170 (D) (mm) | Protrusions excluded |
| 6 | Weight | Approx. 9 kg | — |
| 7 | Data save capacity | SSD256G | — |
| 8 | Display connection | D-SUB, HDMI, DP | — |
| 9 | Monitor app use | LAN | General-purpose PC connection |
| 10 | Appearance and paint colour | Silky shade (Munsell 1Y8.5/0.5) | — |

[Outline drawings of group controller and name of each section] (unit:mm)





[Terminal numbers and names]

Rear of the display/control panel (power supply and communication wire connection terminal blocks)

TB1 terminal arrangement

| Terminal block (TB1) | | |
|----------------------|------|------|
| Terminal name | R(L) | S(N) |
| NO | 1 | 2 |

TB1 terminal function

| NO | Terminal name | Function |
|----|---------------|--------------------------|
| 1 | R(L) | Connect the power supply |
| 2 | S(N) | |

TB2 terminal arrangement

| Terminal block (TB2) | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|------------|------------|--------------|----|----|----|
| Terminal name | | | | | | | RS485-1(+) | RS485-1(-) | RS485-1(GND) | | | |
| NO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

TB2 terminal function

| NO | Terminal name | Function |
|----|---------------|---------------------|
| 1 | | Not used |
| 2 | | |
| 3 | | |
| 4 | | Not used |
| 5 | | |
| 6 | | |
| 7 | RS485-1(+) | Connection to an MC |
| 8 | RS485-1(-) | |
| 9 | RS485-1(GND) | |
| 10 | | Not used |
| 11 | | |
| 12 | | |

3-7 I/O board terminal numbers/names and electrical wiring diagram

[Terminal numbers and names]

| GT1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----|
| | AI1 (IO1) | AI4 (IO4) | AI5 (IO5) | AI8 (IO8) | AO1 (IO9) | AO4 (IO12) | DC12V (12V) | DC5V (5V) | DC12V (12V) | NC |
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | GND | AI3 (IO3) | GND | AI7 (IO7) | GND | AO3 (IO11) | DC5V (5V) | DC12V (12V) | DC5V (5V) | NC |
| | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | GND | AI2 (IO2) | GND | AI6 (IO6) | GND | AO2 (IO10) | DC12V (12V) | DC5V (5V) | DC12V (12V) | NC |

| GT2 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | RY6 (DO6) | RY8 (DO8) | RY1 (DO1) | RY3 (DO3) | COM | IN2 (DI2) | IN4 (DI4) | IN5 (DI5) | IN7 (DI7) | COM |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | RY6 (DO5) | RY7 (DO7) | COM | RY2 (DO2) | RY4 (DO4) | IN1 (DI1) | IN3 (DI3) | COM | IN6 (DI6) | IN8 (DI8) |

GT1

| NO | Terminal name | Function |
|----|---------------|------------------------------|
| 1 | AI1(IO1) | Analogue input 1 |
| 2 | AI4(IO4) | Analogue input 4 |
| 3 | AI5(IO5) | Analogue input 5 |
| 4 | AI8(IO8) | Analogue input 8 |
| 5 | AO1(IO9) | Analogue output 1 |
| 6 | AO4(IO12) | Analogue output 4 |
| 7 | DC12V(12V) | 12 VDC output |
| 8 | DC5V(5V) | 5 VDC output |
| 9 | DC12V(12V) | 12 VDC output |
| 10 | NC | – |
| 11 | GND | Analogue input/output common |
| 12 | AI3(IO3) | Analogue input 3 |
| 13 | GND | Analogue input/output common |
| 14 | AI7(IO7) | Analogue input 7 |
| 15 | GND | Analogue input/output common |
| 16 | AO3(IO11) | Analogue output 3 |
| 17 | DC5V(5V) | 5 VDC output |
| 18 | DC12V(12V) | 12 VDC output |
| 19 | DC5V(5V) | 5 VDC output |
| 20 | NC | – |
| 21 | GND | Analogue input/output common |
| 22 | AI2(IO2) | Analogue input 2 |
| 23 | GND | Analogue input/output common |
| 24 | AI6(IO6) | Analogue input 6 |
| 25 | GND | Analogue input/output common |
| 26 | AO2(IO10) | Analogue output 2 |
| 27 | DC12V(12V) | 12 VDC output |
| 28 | DC5V(5V) | 5 VDC output |
| 29 | DC12V(12V) | 12 VDC output |
| 30 | NC | – |

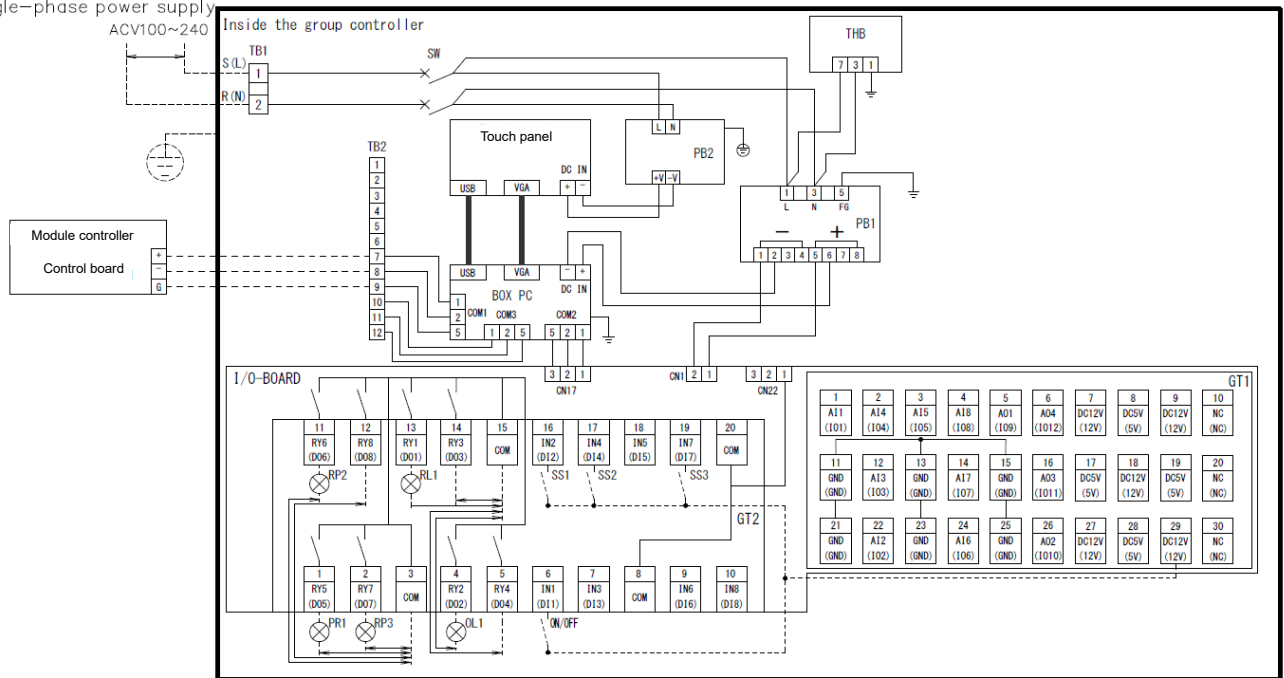
GT2

| NO | Terminal name | Function |
|----|---------------|---------------------------------------|
| 1 | RY5(DO5) | Digital output 5 |
| 2 | RY7(DO7) | Digital output 7 |
| 3 | COM | Digital output commons 5, 6, 7, and 8 |
| 4 | RY2(DO2) | Digital output 2 |
| 5 | RY4(DO4) | Digital output 4 |
| 6 | DI1(IN1) | Digital input 1 |
| 7 | DI3(IN3) | Digital input 3 |
| 8 | COM | Digital input common |
| 9 | DI6(IN6) | Digital input 6 |
| 10 | DI8(IN8) | Digital input 8 |
| 11 | RY6(DO6) | Digital output 6 |
| 12 | RY8(DO8) | Digital output 8 |
| 13 | RY1(DO1) | Digital output 1 |
| 14 | RY3(DO3) | Digital output 3 |
| 15 | COM | Digital output commons 1, 2, 3, and 4 |
| 16 | DI2(IN2) | Digital input 2 |
| 17 | DI4(IN4) | Digital input 4 |
| 18 | DI5(IN5) | Digital input 5 |
| 19 | DI7(IN7) | Digital input 7 |
| 20 | COM | Digital input common |

Note: The symbol enclosed in the parentheses of a terminal name indicates the symbol printed on the I/O board.

[Electrical wiring diagram]

Single-phase power supply
ACV100~240

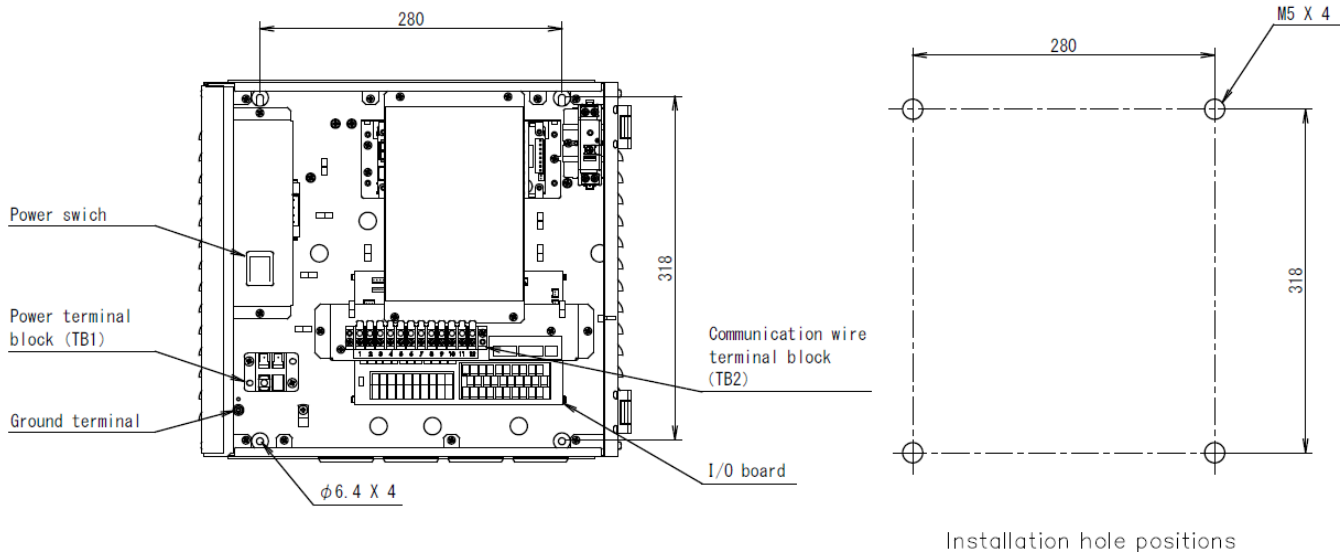


4 Installation Procedure

4-1 List of packaged items

| Component name | Quantity |
|--|----------|
| Group controller main unit | 1 |
| Installation screw (M5 tapping screw) | 4 |
| Round terminal (JST: R1.25-P3.5 or equivalent) | 9 |
| Round terminal (JST: R1.25-4 or equivalent) | 3 |
| Installation & Owner's Manual | 1 |

4-2 Installation method (unit:mm)

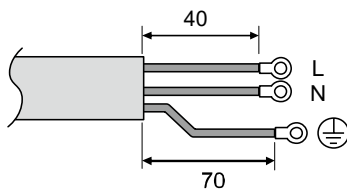


4-3 Power, Signal and Earth wire connection procedure

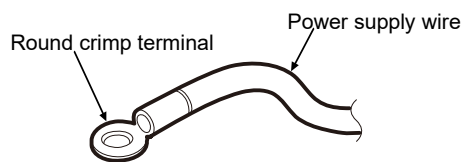
Connect the power, signal and earth wire to the specified terminal blocks.
 Attach round crimp terminals to all wiring and tighten the screws securely.
 After tightening, check that the wiring cannot come out.

About Stripping Length (unit : mm)

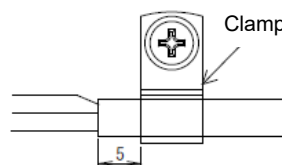
Power supply wire stripping length



Attach a round crimp terminal to each wire of the power supply wire.

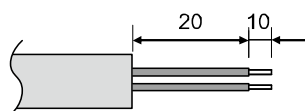


Power wire clamp



Fasten the screw to clamp with torque of 0.9Nm

Signal wire stripping length



Use the following wiring material to connect signal wires and power supply wires. (Locally procured)

| | Nominal cross section area | Outer Diameter | Permissible length |
|------------------|----------------------------|----------------|--------------------|
| For power supply | 0.75~1.25 mm ² | 9.2~10.5mm | 50 m or less |
| For Signal | 1.25mm ² | - | 100 m or less |

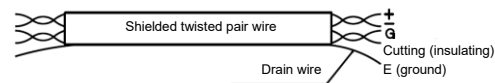
4-4 Communication wire connection procedure

Connect the wire to the communication wire terminal block (TB2) with the supplied round terminal.

| | |
|------------------------------|---------------------------------|
| Round terminal type | R type |
| Round terminal model number | JST: R1.25-3.5P (or equivalent) |
| Applicable tool model number | JST: YHT-2210 (or equivalent) |

For the communication wire between group controller (GC) and module controller (MC), use a shielded twisted pair wire. The wire must not exceed the applicable length given in the table below. **Never route the wire together with the power supply wire of any device. Otherwise, the communication wire may be affected by noise, so that the device cannot operate normally.** Do not turn on the power supply until all wiring is completed. Otherwise, device faults or electric shock may occur.

| Nominal cross section area | Permissible length |
|----------------------------|--------------------|
| 0.75 mm ² | 100 m or less |
| 1.25mm ² | 500 m or less |



4-5 Procedure for connecting other external wires

Connect the necessary external wires to terminal blocks GT1 and GT2 on the I/O board, using the ring terminal (M3).

The LAN cable must be up to 30 m in length. To extend it, use an optical cable and a HUB.

4-6 Address setting

To connect a module controller (MC) to the group controller (GC), the address of the MC must be set.

5 Startup and Login

5-1 Operation privilege

Different users have different operation privileges as indicated in the table below.

| No | User | Privilege | Password |
|----|---------------|---|------------------------|
| 1 | Viewer | Can only view data. Cannot change settings. | Not necessary |
| 2 | Administrator | Can view data and setting items, and change settings. | Administrator password |

The administrator password is set to "0000" before shipment.

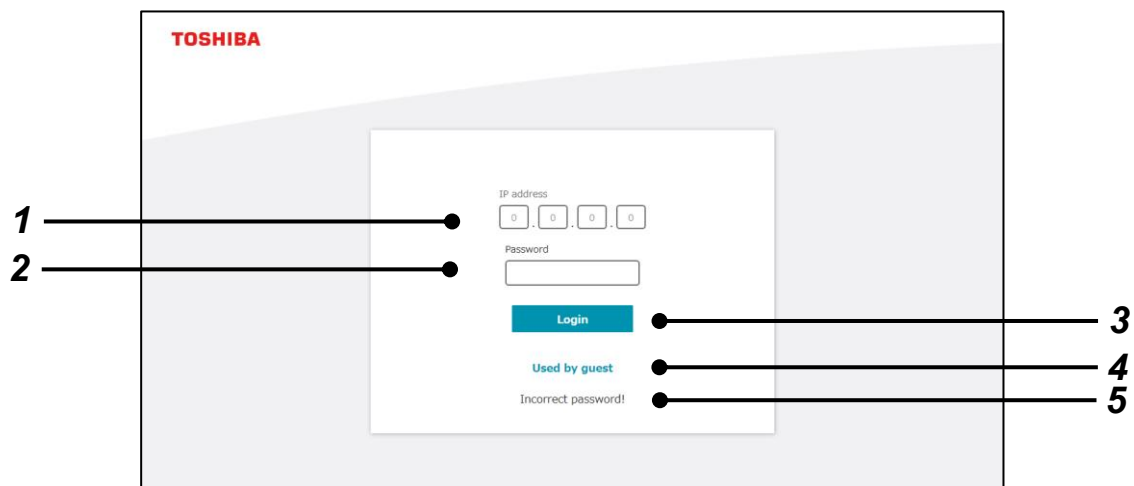
If necessary, change the setting from the password setting screen.

5-2 GC startup (initial operation check)

Turning ON the main unit power supply causes the GC application to start up.

5-3 Login operation

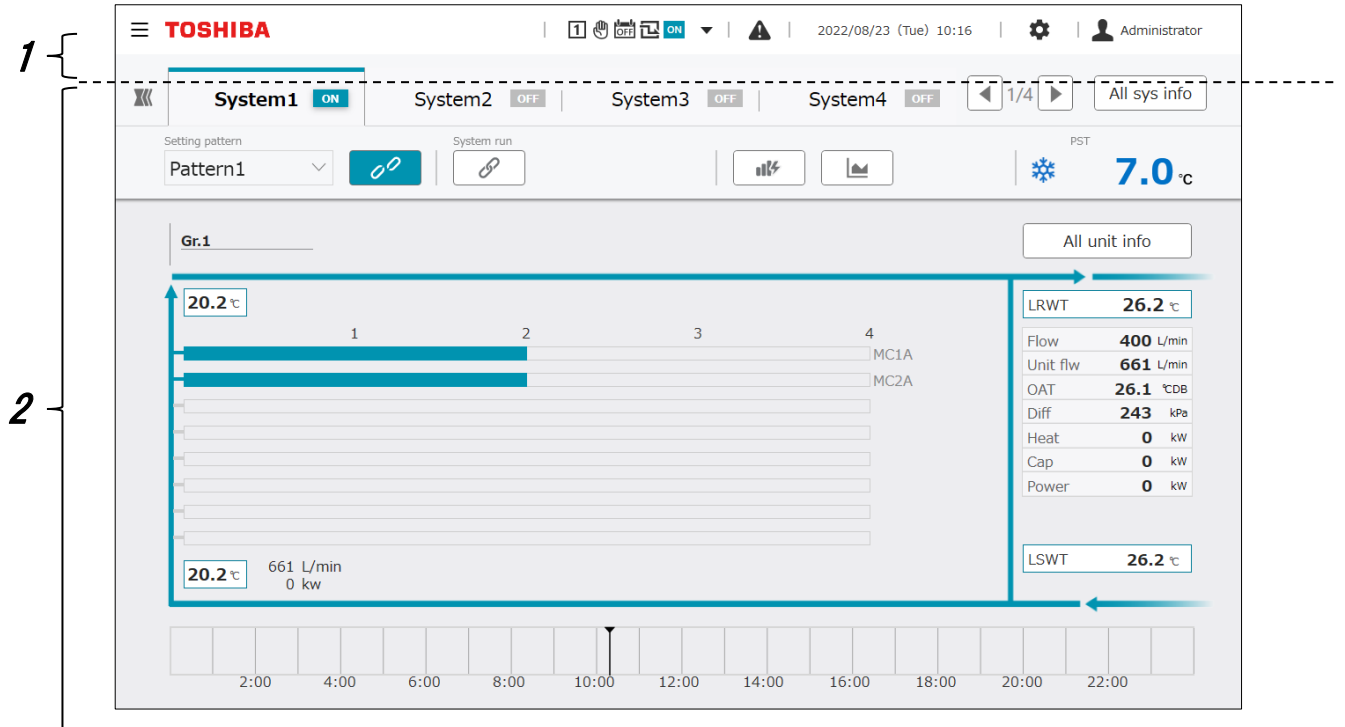
After GC startup, the login screen appears first.



| No | Item | Function |
|----|-----------------------|--|
| 1 | IP address input | Enter the IP address that is set for the GC to connect. Its input is necessary only for the PC monitor app. The initial value is "192.168.1.40". |
| 2 | Password input | You must enter it to use the GC as an administrator. Display the input panel with touch operation. |
| 3 | Login | After entering the password, execute login with touch operation. |
| 4 | Used by guest | You need not enter a password to use the GC as a viewer. After touch operation, the system general information screen appears. |
| 5 | Error message display | If login fails after you click either the "Login" or "Used by guest" button, an error message appears. |

6 Name of Each Display Section and Common Functions

6-1 Display classifications



| No | Name | Description |
|----|----------------------|---|
| 1 | Header | Displays functions common to each screen. |
| 2 | Main display section | Displayed information is switched according to the selected menu. |

6-2 Header

A common header is displayed at the top of each screen.

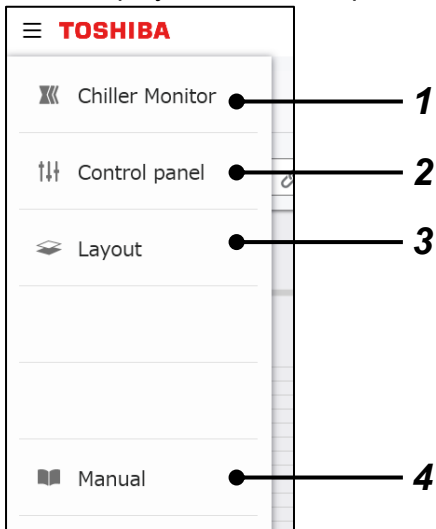


Display items

| No | Name | Function | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-----------------------|--|------|------|-------------|-----------------|--|---|--|--|------------------|--|--|--|---|----------|--|--|--|---|--------|--|---|--|--|------------------|--|-------------------------------------|--|-----------------------------------|
| 1 | Menu button | Display the desired menu with touch operation. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | GC status display | <p>Displays the current GC status with an icon. You can operate the entire GC with touch operation.</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Config. pattern</td> <td></td> <td>Displays the system config. pattern number that is currently set.</td> </tr> <tr> <td></td> <td>Displayed during a config. pattern change.</td> </tr> <tr> <td rowspan="2">Operating status</td> <td></td> <td>Displayed if the operating status is Unit.</td> </tr> <tr> <td></td> <td>Displayed if the operating status is Rmt/Ext.</td> </tr> <tr> <td rowspan="2">Schedule</td> <td></td> <td>Displayed if the schedule setting is ON.</td> </tr> <tr> <td></td> <td>Displayed if the schedule setting is OFF.</td> </tr> <tr> <td rowspan="2">Demand</td> <td></td> <td>If the demand setting is OFF, the greyed out icon is displayed.</td> </tr> <tr> <td></td> <td>If the demand setting is ON, the setting level is displayed.</td> </tr> <tr> <td rowspan="2">Operation status</td> <td></td> <td>Displayed when the GC is operating.</td> </tr> <tr> <td></td> <td>Displayed when the GC is stopped.</td> </tr> </tbody> </table> | Item | Icon | Description | Config. pattern | | Displays the system config. pattern number that is currently set. | | Displayed during a config. pattern change. | Operating status | | Displayed if the operating status is Unit. | | Displayed if the operating status is Rmt/Ext. | Schedule | | Displayed if the schedule setting is ON. | | Displayed if the schedule setting is OFF. | Demand | | If the demand setting is OFF, the greyed out icon is displayed. | | If the demand setting is ON, the setting level is displayed. | Operation status | | Displayed when the GC is operating. | | Displayed when the GC is stopped. |
| Item | Icon | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Config. pattern | | Displays the system config. pattern number that is currently set. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Displayed during a config. pattern change. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating status | | Displayed if the operating status is Unit. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Displayed if the operating status is Rmt/Ext. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Schedule | | Displayed if the schedule setting is ON. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Displayed if the schedule setting is OFF. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Demand | | If the demand setting is OFF, the greyed out icon is displayed. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | If the demand setting is ON, the setting level is displayed. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation status | | Displayed when the GC is operating. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Displayed when the GC is stopped. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Failure display | <p>Displays the number of failures that have occurred. Display the failure history screen with touch operation.</p> <p>When a failure occurs, the icon is displayed in red.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Date and time display | Displays the current date and time. Make settings on the time setting screen. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Setting button | Displays various setting menus. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Login status | <p>Displays the login status.</p> <p>The logout panel is displayed with touch operation, and executing logout returns you to the login screen.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

6-3 Menus

Touch operation on the menu button in the header causes the items to slide.
Menu display items differ depending on the settings made before delivery.

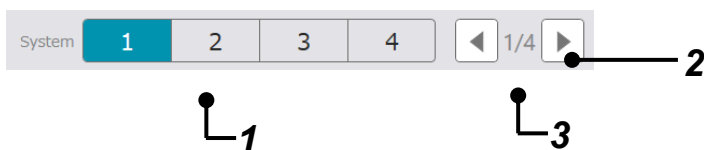


Display items

| No | Item | Description |
|----|-----------------|--|
| 1 | Chiller Monitor | Displays the chiller operation status monitor screen. |
| 2 | Control panel | No function |
| 3 | Layout | No function |
| 4 | Manual (PDF) | Downloads the PDF file containing this owner's manual. Displayed only for the PC monitor app. |

6-4 System switching buttons

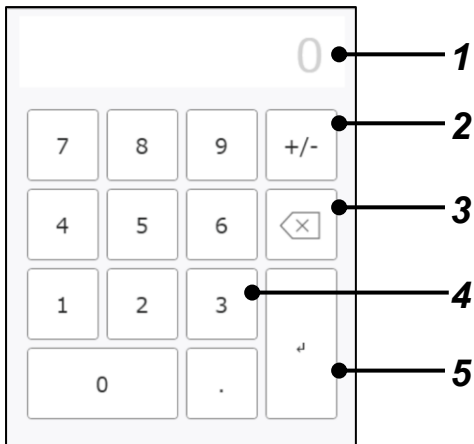
Displayed on a screen on which to switch the system to select.



| No | Name | Function |
|----|--------------------------------|--|
| 1 | System selection | Select the system to operate and display with touch operation. The background of the selected system number is displayed in blue. |
| 2 | Display system group switching | Switch the "System selection" display in units of 4 systems. Up to 4 systems can be displayed on the screen at a time. |
| 3 | Displayed system group number | Indicates the currently displayed "System selection" group numbers. Example: Systems 1 to 4 → 1/4, systems 5 to 8 → 2/4 |

6-5 Value input panel

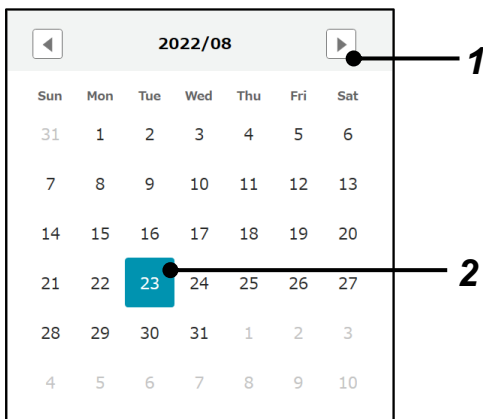
This panel is displayed on a screen on which to enter a value.



| No | Name | Function |
|----|----------------------|---|
| 1 | Input value display | Displays the selected and input value. If the input value is out of range, the display frame turns red. |
| 2 | +/- switching button | Switch the input value between positive and negative values with touch operation. |
| 3 | Erase button | Erase the input value with touch operation. |
| 4 | Number buttons | Select a number with touch operation. |
| 5 | Confirm button | Confirm the input value with touch operation. |

6-6 Calendar panel


This panel is displayed on a screen on which to select a date.

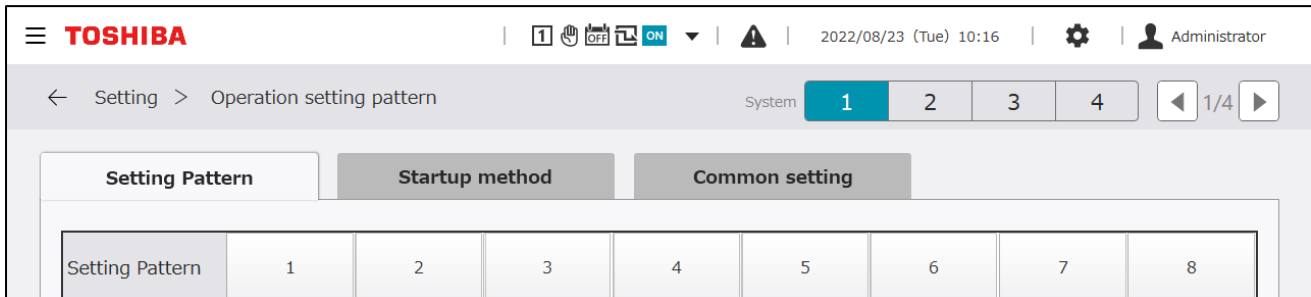


| No | Name | Function | | | | | | | | | |
|--------------------|----------------|--|------|---|-------------|------------------------|--|---|--------------------|--|--|
| 1 | Month feed | <table border="1"> <thead> <tr> <th>Item</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Previous month display</td> <td></td> <td>Displays the calendar for the month before the currently displayed month.</td> </tr> <tr> <td>Next month display</td> <td></td> <td>Displays the calendar for the month after the currently displayed month.</td> </tr> </tbody> </table> | Item | Icon | Description | Previous month display | | Displays the calendar for the month before the currently displayed month. | Next month display | | Displays the calendar for the month after the currently displayed month. |
| | | Item | Icon | Description | | | | | | | |
| | | Previous month display | | Displays the calendar for the month before the currently displayed month. | | | | | | | |
| Next month display | | Displays the calendar for the month after the currently displayed month. | | | | | | | | | |
| 2 | Date selection | Select a date with touch operation. When the panel is displayed, the background of the selected date is displayed in blue. After date selection operation, the panel automatically closes. | | | | | | | | | |

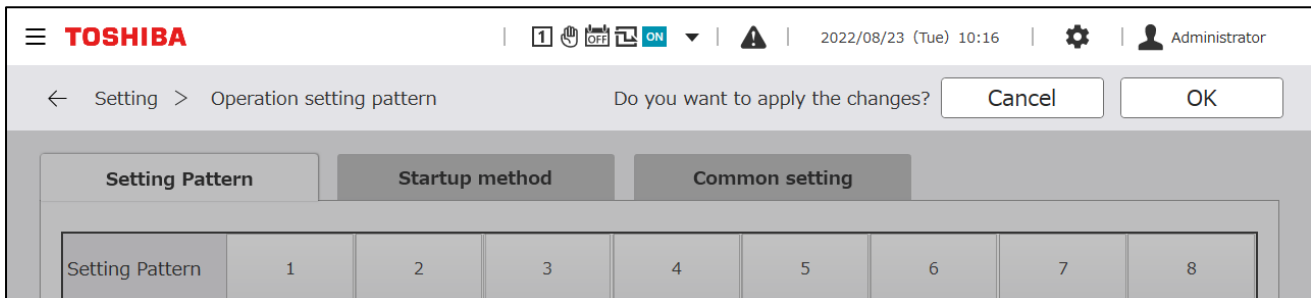
6-7 Reflecting settings and then returning to the top setting screen

The following describes the method for returning to the top setting screen from each setting screen and the procedure for reflecting setting changes.

1 Change setting values and then touch the  icon (Return button) located at the top left of the screen.



2 The message “Do you want to apply the changes?” appears, as well as the “Cancel” and “OK” buttons.



Display items

| Operation target | Function |
|------------------|---|
| Cancel button | Discards the changes and closes the setting screen. |
| OK button | Applies the changes to the GC. |

3 The top setting screen appears.

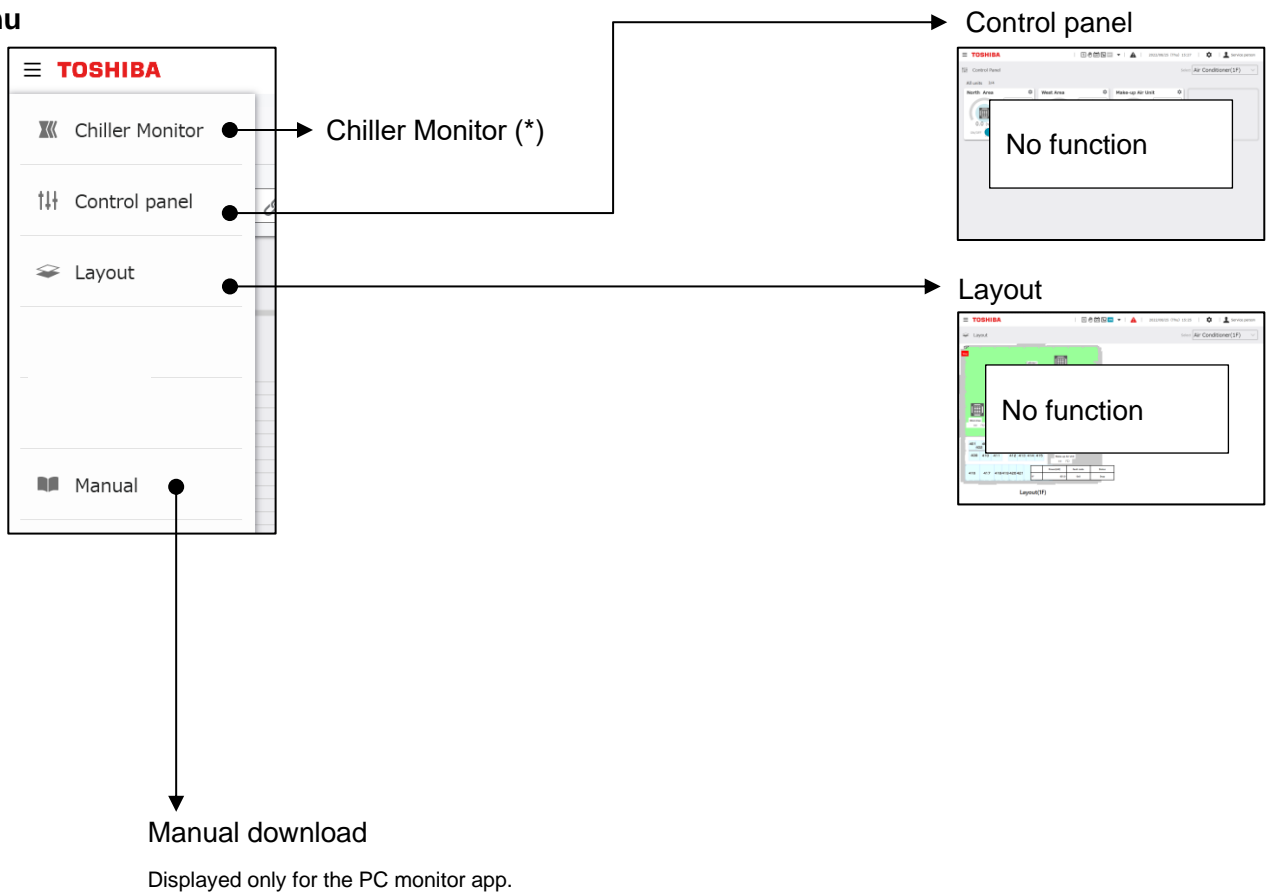
Notes

- Note 1: After making changes to settings, be sure to select the OK button if you want to apply the changes to the GC.
- Note 2: If no changes are made to the setting values on the setting screen, the Cancel button/OK button do not appear when the Return button is selected.
- Note 3: If the same operation is performed on multiple input screens, such as that on the touch panel and that on the PC monitor app, the operation performed last will be given priority.
- Note 4: The PC monitor app is to be restarted only if the language switching is made.

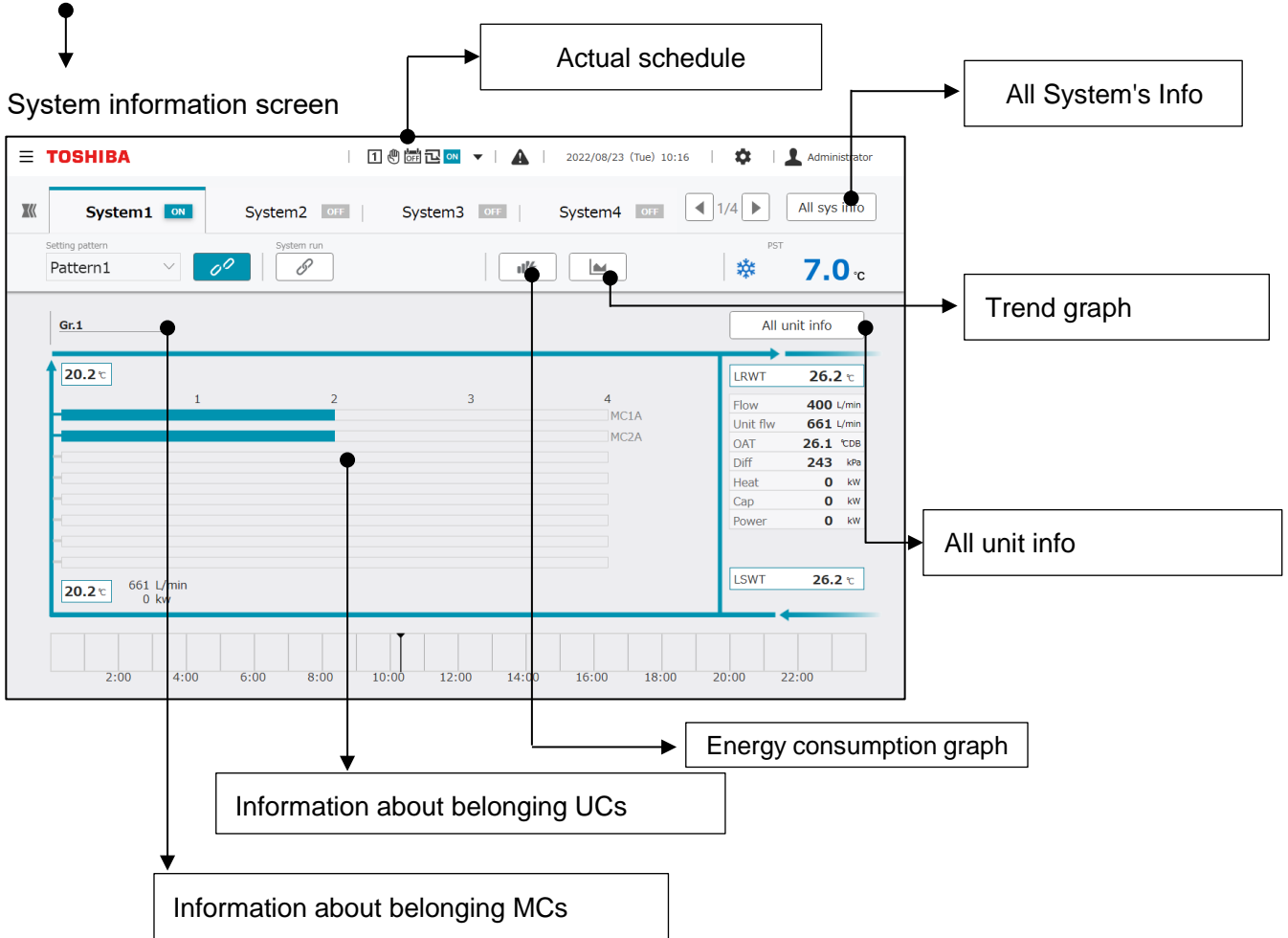
7 List of Screens

To display each screen, use the menu button in the header or the setting button.

Menu



Chiller Monitor (*)



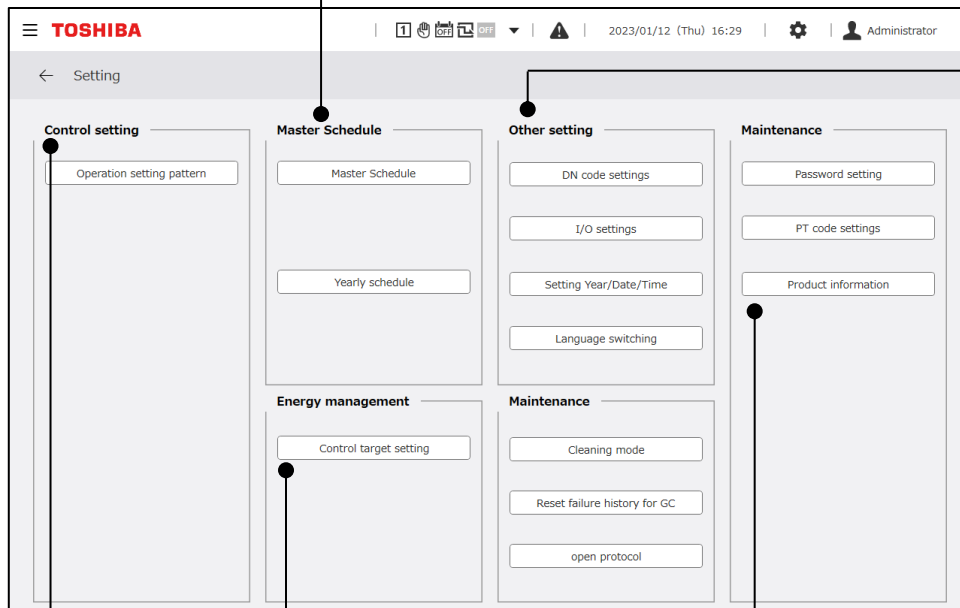
Setting



Top setting screen

Schedule Settings

- Master schedule settings
- Yearly schedule settings



Other setting

- DN code settings
- I/O settings
- Setting Year/Date/Time
- Language switching

Energy management settings

- Control target setting

Maintenance

- Password setting
- PT code settings
- Product information
- Cleaning mode
- Reset failure history for GC
- Open protocol

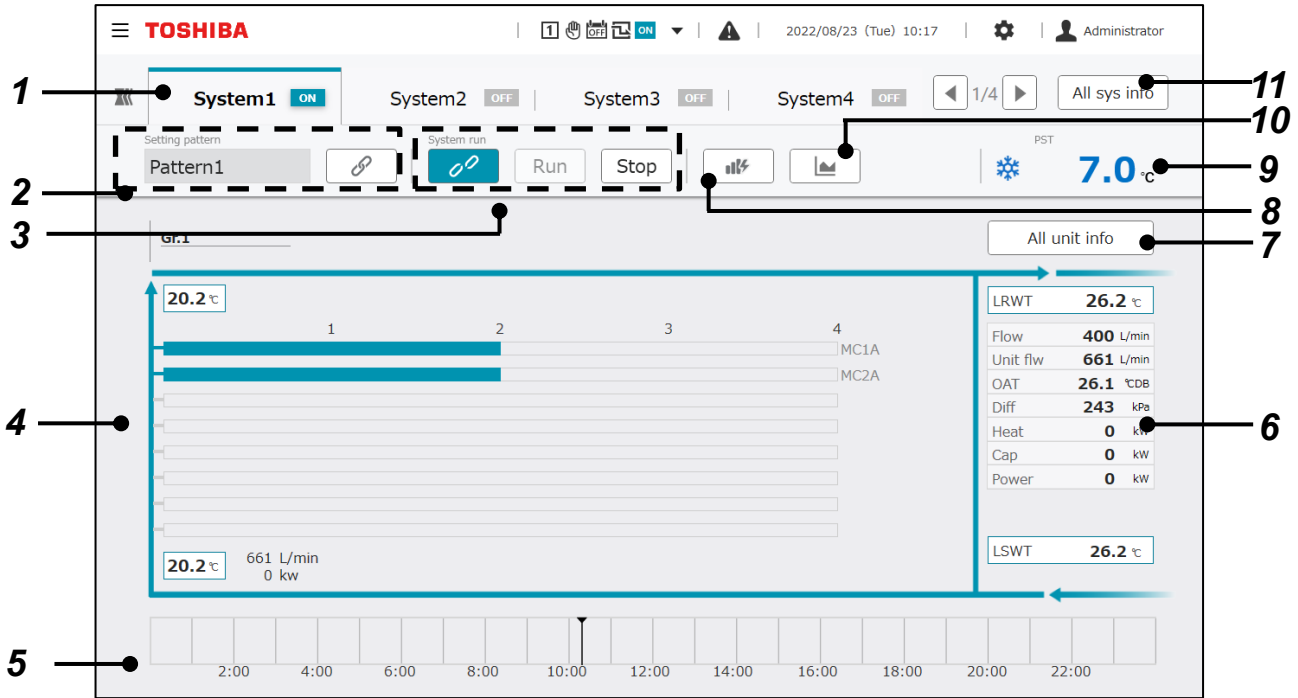
Control

- Setting pattern setting

8 Chiller Monitor
















8-1 System Information

The system information screen is shown in the figure below.



Display items

| No | Name | Function | | | | | | | | | | | | |
|------|---------------------------------|--|-------------|-------------|------------------|-------------|------|-------------|--|---------|--|-----------|--|------------------|
| 1 | System selection tab | <p>Select the system for which to display information with touch operation. The tab displays the system name and the operation status icon. If a failure occurs in a belonging device, a failure icon appears.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Stopped</td> <td></td> <td>Operating</td> <td></td> <td>A failure occurs</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | Icon | Description | | Stopped | | Operating | | A failure occurs |
| Icon | Description | Icon | Description | Icon | Description | | | | | | | | | |
| | Stopped | | Operating | | A failure occurs | | | | | | | | | |
| 2 | Setting Pattern | Displays the setting pattern number that is currently applied to the selected system. The setting pattern can be applied with “Config. pattern” interlock and system individual setting. | | | | | | | | | | | | |
| 3 | Operation status | Displays the operation status of the selected system. You can specify which of “GC operation status” interlock and system individual setting to use to set the operation status. | | | | | | | | | | | | |
| 4 | Belonging device status display | Displays the information about the heat source device group belonging to the selected system. | | | | | | | | | | | | |
| 5 | Actual schedule display | <p>Displays the actual schedule information about the selected system on the view day in a simple manner. Not displayed if the schedule control is set to OFF.</p> <p>Display items Config. pattern/All systems run and stop events Setting pattern/Individual system run and stop events</p> | | | | | | | | | | | | |

| No | Name | Function | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--------------|--|---|--|--|---|---|---|--|---|---|--|------|--|-----|--|-------|---|
| 6 | Information display | Displays each data item about the selected system. | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Item</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>LRWT</td> <td>Displays the supply water temperature of the system (°C)</td> </tr> <tr> <td>LSWT</td> <td>Displays the return water temperature of the system (°C)</td> </tr> <tr> <td>OAT</td> <td>Displays the outside air temperature (°CDB)</td> </tr> <tr> <td>Load flw</td> <td>Displays the load side flow of the system (L/min)</td> </tr> <tr> <td>Unit flw</td> <td>Displays the heat source device side flow of the system (L/min)</td> </tr> <tr> <td>Diff</td> <td>Displays the pressure difference between headers of the system (kPa)</td> </tr> <tr> <td>Heat</td> <td>Displays the load side capacity of the system (kW)</td> </tr> <tr> <td>Cap</td> <td>Displays the total output of the heat source device (kW)</td> </tr> <tr> <td>Power</td> <td>Displays the total power consumption (kW)</td> </tr> </tbody> </table> | Item | Function | LRWT | Displays the supply water temperature of the system (°C) | LSWT | Displays the return water temperature of the system (°C) | OAT | Displays the outside air temperature (°CDB) | Load flw | Displays the load side flow of the system (L/min) | Unit flw | Displays the heat source device side flow of the system (L/min) | Diff | Displays the pressure difference between headers of the system (kPa) | Heat | Displays the load side capacity of the system (kW) | Cap | Displays the total output of the heat source device (kW) | Power | Displays the total power consumption (kW) |
| | | Item | Function | | | | | | | | | | | | | | | | | | | |
| | | LRWT | Displays the supply water temperature of the system (°C) | | | | | | | | | | | | | | | | | | | |
| | | LSWT | Displays the return water temperature of the system (°C) | | | | | | | | | | | | | | | | | | | |
| | | OAT | Displays the outside air temperature (°CDB) | | | | | | | | | | | | | | | | | | | |
| | | Load flw | Displays the load side flow of the system (L/min) | | | | | | | | | | | | | | | | | | | |
| | | Unit flw | Displays the heat source device side flow of the system (L/min) | | | | | | | | | | | | | | | | | | | |
| | | Diff | Displays the pressure difference between headers of the system (kPa) | | | | | | | | | | | | | | | | | | | |
| | | Heat | Displays the load side capacity of the system (kW) | | | | | | | | | | | | | | | | | | | |
| Cap | Displays the total output of the heat source device (kW) | | | | | | | | | | | | | | | | | | | | | |
| Power | Displays the total power consumption (kW) | | | | | | | | | | | | | | | | | | | | | |
| 7 | All unit info button | Displays a list of information about all heat source device groups belonging to the selected system. | | | | | | | | | | | | | | | | | | | | |
| 8 | Energy consumption button | Display the energy consumption graph screen with touch operation. | | | | | | | | | | | | | | | | | | | | |
| 9 | Mode • PST display | Displays the operation mode that is set in the system, as well as the set temperature. The operation mode is displayed with an icon. | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Cool</td> <td></td> <td>Cool storage</td> </tr> <tr> <td></td> <td>Heat</td> <td></td> <td>Heat storage</td> </tr> <tr> <td></td> <td>Stop</td> <td></td> <td></td> </tr> </tbody> </table> | Icon | Description | Icon | Description |  | Cool |  | Cool storage |  | Heat |  | Heat storage |  | Stop | | | | | | |
| | | Icon | Description | Icon | Description | | | | | | | | | | | | | | | | | |
| | |  | Cool |  | Cool storage | | | | | | | | | | | | | | | | | |
|  | Heat |  | Heat storage | | | | | | | | | | | | | | | | | | | |
|  | Stop | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Trend button | Display the trend graph screen with touch operation. | | | | | | | | | | | | | | | | | | | | |
| 11 | All sys info button | Display the screen for displaying a list of information about all systems of the GC with touch operation. | | | | | | | | | | | | | | | | | | | | |

Notes

Note 1: The supply and return water temperatures can be displayed only if supply and return water temperature sensors are set.

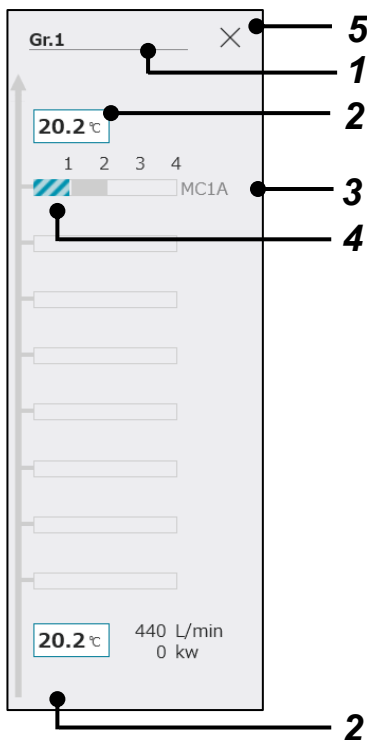
Note 2: The load side flow can be displayed only if a load side flow meter is installed.

Note 3: The load side heat capacity can be displayed only if supply and return water temperature sensors and a load side flow meter are installed.




















Note 4: Run/stop and config. and setting pattern operations may not be accepted depending on the settings.

Belonging device status display

Each heat source Grp. item is enlarged by touching the area.

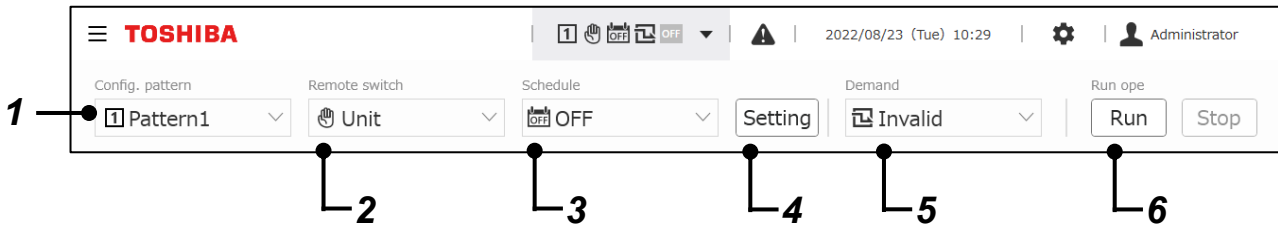


Display items

| No. | Item | Function | | | | | | | | | | | | | | | | | | | | |
|--|------------------------------------|---|---------|-------------------|--|--|---|-----------|--|---------|---|------------------|--|------|-----------|--|---------|---|------------------|----------------------------------|------|---|
| 1 | Heat source Grp. name | Displays the heat source device group information with touch operation. | | | | | | | | | | | | | | | | | | | | |
| 2 | Information display | Displays the following information about the displayed heat source device group. <table border="1" data-bbox="917 577 1401 846"> <thead> <tr> <th>Item</th> <th>Display unit</th> </tr> </thead> <tbody> <tr> <td>Outlet water temperature (upper part of the display)</td> <td>°C</td> </tr> <tr> <td>Inlet water temperature (lower part of the display)</td> <td>°C</td> </tr> <tr> <td>Flow</td> <td>L/min</td> </tr> <tr> <td>Capacity</td> <td>kW</td> </tr> </tbody> </table> | Item | Display unit | Outlet water temperature (upper part of the display) | °C | Inlet water temperature (lower part of the display) | °C | Flow | L/min | Capacity | kW | | | | | | | | | | |
| Item | Display unit | | | | | | | | | | | | | | | | | | | | | |
| Outlet water temperature (upper part of the display) | °C | | | | | | | | | | | | | | | | | | | | | |
| Inlet water temperature (lower part of the display) | °C | | | | | | | | | | | | | | | | | | | | | |
| Flow | L/min | | | | | | | | | | | | | | | | | | | | | |
| Capacity | kW | | | | | | | | | | | | | | | | | | | | | |
| 3 | MC name display | Displays the names of the MCs belonging to the heat source device group. When a failure occurs, a failure icon appears. When a communication alert occurs, the text turns blue. Move to the MC information screen with touch operation. | | | | | | | | | | | | | | | | | | | | |
| 4 | Display of number of belonging UCs | Displays the number of UCs connected to the displayed MC on a bar and indicates the UC status with colour.  <table border="1" data-bbox="917 1216 1433 1749"> <thead> <tr> <th>Display</th> <th>Connection status</th> <th>Operating Status</th> </tr> </thead> <tbody> <tr> <td> Blue</td> <td rowspan="3">Remote</td> <td>Operating</td> </tr> <tr> <td> Grey</td> <td>Stopped</td> </tr> <tr> <td> Red</td> <td>A failure occurs</td> </tr> <tr> <td> Blue (striped)</td> <td rowspan="3">Unit</td> <td>Operating</td> </tr> <tr> <td> Grey (striped)</td> <td>Stopped</td> </tr> <tr> <td> Red (striped)</td> <td>A failure occurs</td> </tr> <tr> <td>No colour (other than the above)</td> <td>None</td> <td>–</td> </tr> </tbody> </table> | Display | Connection status | Operating Status |  Blue | Remote | Operating |  Grey | Stopped |  Red | A failure occurs |  Blue (striped) | Unit | Operating |  Grey (striped) | Stopped |  Red (striped) | A failure occurs | No colour (other than the above) | None | – |
| Display | Connection status | Operating Status | | | | | | | | | | | | | | | | | | | | |
|  Blue | Remote | Operating | | | | | | | | | | | | | | | | | | | | |
|  Grey | | Stopped | | | | | | | | | | | | | | | | | | | | |
|  Red | | A failure occurs | | | | | | | | | | | | | | | | | | | | |
|  Blue (striped) | Unit | Operating | | | | | | | | | | | | | | | | | | | | |
|  Grey (striped) | | Stopped | | | | | | | | | | | | | | | | | | | | |
|  Red (striped) | | A failure occurs | | | | | | | | | | | | | | | | | | | | |
| No colour (other than the above) | None | – | | | | | | | | | | | | | | | | | | | | |
| 5 | End of enlarged display | Ends heat source device group area enlarged display. | | | | | | | | | | | | | | | | | | | | |



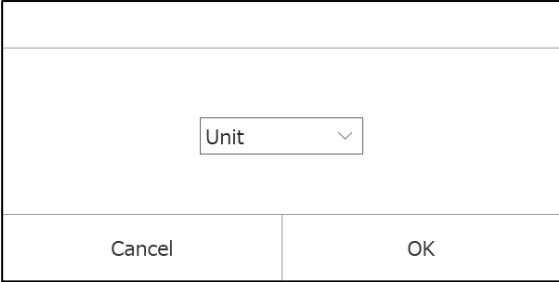




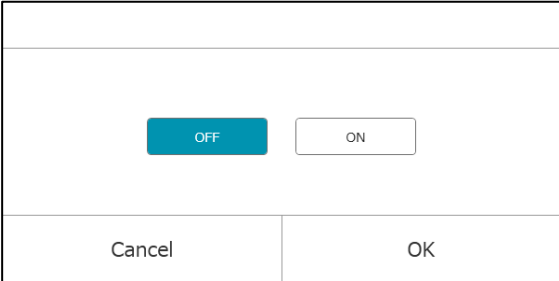

8-2 GC operation (batch operation on all systems)

You can display operation items by touching the GC status display section on the common header. Switch between batch operation and setting for the entire GC.



Display items

| No. | Item | Function | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---------------------------|---|------|-------------|-----|------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|--------|-----|-----|-----|-----|
| 1 | Config. pattern switching | <p>Display the “Config. pattern setting panel” with touch operation.</p> <p>Config. pattern setting panel The panel displays the operation mode setting status for each system of the selected pattern, allocation setting status of each UC, and interlock output setting status. Select the desired pattern and confirm the changes by touching the “OK” button. Use the “Cancel” button to discard the changes and close the dialogue box.</p> <p>The screenshot shows a 'Config. pattern' dropdown set to 'Pattern1'. Below it is a grid of 16 system icons (1-16) with various status icons. Underneath is a table for UC allocation:</p> <table border="1"> <thead> <tr> <th></th> <th>UC1</th> <th>UC2</th> <th>UC3</th> <th>UC4</th> <th>UC5</th> <th>UC6</th> <th>UC7</th> <th>UC8</th> <th>UC9</th> <th>UC10</th> <th>UC11</th> <th>UC12</th> <th>UC13</th> <th>UC14</th> <th>UC15</th> <th>UC16</th> </tr> </thead> <tbody> <tr><td>MC1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>MC2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr><td>MC3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr><td>MC4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>MCS</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>MC6</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>MC7</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>MC8</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr> </tbody> </table> <p>Below the table is an 'Interlock' section with a table:</p> <table border="1"> <thead> <tr> <th>No.</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>Output</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> </tr> </tbody> </table> <p>At the bottom are 'Cancel' and 'OK' buttons.</p> | | UC1 | UC2 | UC3 | UC4 | UC5 | UC6 | UC7 | UC8 | UC9 | UC10 | UC11 | UC12 | UC13 | UC14 | UC15 | UC16 | MC1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | MC2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | MC3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | MC4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | MCS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | MC6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | MC7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | MC8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | No. | 1 | 2 | 3 | 4 | Output | OFF | OFF | OFF | OFF |
| | UC1 | UC2 | UC3 | UC4 | UC5 | UC6 | UC7 | UC8 | UC9 | UC10 | UC11 | UC12 | UC13 | UC14 | UC15 | UC16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MCS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MC8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | OFF | OFF | OFF | OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>If the setting pattern interlock status for the system is set to “Individual independent”, the following icon appears:</p> <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Individual independent</td> </tr> </tbody> </table> | Icon | Description | | Individual independent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Icon | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Individual independent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| No. | Item | Function | | | | | | |
|--|--|---|------|--------|--|---|--|--|
| 2 | GC operation switching | <p>Display the "GC operation change panel" with touch operation.</p> <p>GC operation change panel Select a GC operation privilege.</p> <table border="1" data-bbox="576 371 1417 551"> <thead> <tr> <th data-bbox="576 371 831 412">Item</th> <th data-bbox="831 371 1417 412">Status</th> </tr> </thead> <tbody> <tr> <td data-bbox="576 412 831 479">  (Unit) </td> <td data-bbox="831 412 1417 479">Perform operation with the touch panel or the PC.</td> </tr> <tr> <td data-bbox="576 479 831 546">  (Remote) </td> <td data-bbox="831 479 1417 546">Perform operation with external signal input or with Modbus and other communication.</td> </tr> </tbody> </table> <p>Use the "OK" button to confirm the changes. Use the "Cancel" button to discard the changes and close the panel.</p>  | Item | Status |  (Unit) | Perform operation with the touch panel or the PC. |  (Remote) | Perform operation with external signal input or with Modbus and other communication. |
| Item | Status | | | | | | | |
|  (Unit) | Perform operation with the touch panel or the PC. | | | | | | | |
|  (Remote) | Perform operation with external signal input or with Modbus and other communication. | | | | | | | |
| 3 | Schedule setting switching | <p>Display the "Schedule function switching panel" with touch operation.</p> <p>Schedule function switching panel Switch the schedule function between ON and OFF. Select between ON and OFF with touch operation and use the "OK" button to confirm the changes. Use the "Cancel" button to discard the changes and close the panel.</p>  | | | | | | |
| 4 | Setting button | <p>Display the actual schedule setting screen with touch operation.</p> | | | | | | |
| 5 | Demand setting switching | <p>Display the "Demand setting panel" with touch operation.</p> <p>Demand setting panel Switch the demand function between ON and OFF. If ON, select an applicable level. Select applicable information from the list with touch operation and use the "OK" button to confirm the changes. Use the "Cancel" button to discard the changes and close the panel.</p>  | | | | | | |

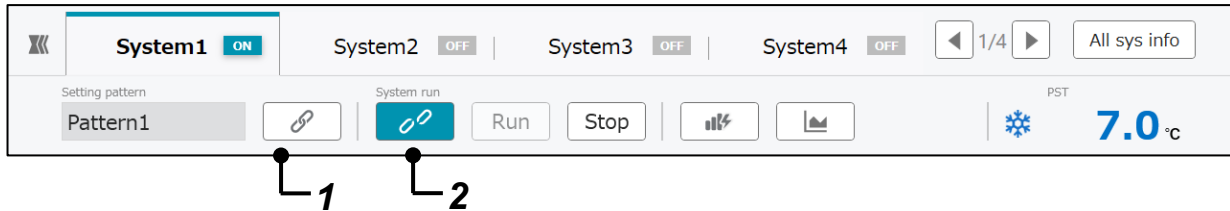
| No. | Item | Function |
|-----|-------------------------|---|
| 6 | Run ope (Run / Stop) | <p>Switch the GC operation status. Display the "Confirmation panel" by touching the Run or Stop button.</p> <p>Confirmation panel Use the "OK" button to confirm the changes. Use the "Cancel" button to discard the changes and close the panel.</p> <div data-bbox="580 427 1139 663" style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Do you want to run all systems? Is it OK with you?</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Cancel OK </div> </div> |

Notes

- Note 1: For "Config. pattern" and "Run ope", if the operation mode is "Rmt" and the relevant external input or Modbus and BACnet control is set, button operation is disabled.
- Note 2: Depending on the setting of interlock with the area controller, Run ope setting may not be reflected in each system.
- Note 3: When the operation mode is "Rmt", if the demand operation from the relevant external input or Modbus and BACnet is set, touch panel operation or operation from the PC monitor app is disabled. When operation from the touch panel and the PC monitor app is enabled, the operation performed last will be given priority.
- Note 4: Run ope and Config. pattern switching may not be accepted depending on the settings.

8-3 System individual operation

You can perform setting pattern and run/stop switching operation on an individual system basis. In the selected system information display section on the system information display screen, switch between operation on an individual system basis or with high-order interlock.



Display items

| No. | Item | Function | | | | | | | | | |
|------|---|--|------|----------|-------------|--|----------------------|--|--|------------------------|---|
| 1 | Pattern operation method switching and setting pattern number setting | <p>You can switch the system pattern operation method between high-order interlock and individual by touching the icon.</p> <p>Pattern operation method switching button</p> <table border="1"> <thead> <tr> <th>Icon</th> <th>Function</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>High-order interlock</td> <td>Interlocks with the config. pattern.</td> </tr> <tr> <td></td> <td>Individual independent</td> <td>Select the setting pattern with the system independently.</td> </tr> </tbody> </table> <p>If the selected system pattern operation method is individual, you can touch a setting pattern number and change settings from the "Setting pattern setting panel". Each system schedule is applied. If the selected system pattern operation method is high-order interlock, the pattern number that is set in the config. pattern is applied. System schedule is applied.</p> <p>Setting pattern setting panel Select a setting pattern number from the list with touch operation and use the "OK" button to confirm the changes. Use the "Cancel" button to discard the changes and close the panel.</p> | Icon | Function | Description | | High-order interlock | Interlocks with the config. pattern. | | Individual independent | Select the setting pattern with the system independently. |
| Icon | Function | Description | | | | | | | | | |
| | High-order interlock | Interlocks with the config. pattern. | | | | | | | | | |
| | Individual independent | Select the setting pattern with the system independently. | | | | | | | | | |
| 2 | System run operation method switching and run/stop operation | <p>You can switch the system run operation method between high-order interlock and individual by touching the icon.</p> <p>System run operation method switching button</p> <table border="1"> <thead> <tr> <th>Icon</th> <th>Function</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>High-order interlock</td> <td>Interlocks with the GC operation status.</td> </tr> <tr> <td></td> <td>Individual</td> <td>Performs run operation with the selected system individually.</td> </tr> </tbody> </table> <p>If the selected system run operation method is individual, you can switch the operation status by touching the Run/Stop button. Each system schedule is applied. If the selected system run operation method is high-order interlock, the GC operation status is reflected. System schedule is applied.</p> | Icon | Function | Description | | High-order interlock | Interlocks with the GC operation status. | | Individual | Performs run operation with the selected system individually. |
| Icon | Function | Description | | | | | | | | | |
| | High-order interlock | Interlocks with the GC operation status. | | | | | | | | | |
| | Individual | Performs run operation with the selected system individually. | | | | | | | | | |

Notes

Note 1: For "Setting pattern" and "System run", if the operation mode is "Rmt" and the relevant external input or Modbus and BACnet control is set, button operation is disabled even for "Individual".

Note 2: For System run operation and Setting pattern switching, operation may not be accepted depending on the settings.

8-4 System statuses

The statuses of all systems are displayed in a list.

| TOSHIBA | | | | | | | | |
|-------------------|----------------|-------|----------|-----------------|----------------|----------|--------|-----------|
| All System's Info | | | | | | | | |
| Status | Measured value | | Input | | Monthly report | | | |
| Fail | Name | State | Rmt sw | Setting Pattern | Mode | Start up | Demand | PST shift |
| | Sys1 | ON | OFF / ON | 1 / 1 | ❄️ | --- | --- | --- |
| | Sys2 | OFF | ON / ON | 1 / 1 | ☀️ | --- | --- | --- |
| | Sys3 | OFF | ON / ON | 1 / 1 | 🛑 | --- | --- | --- |
| | Sys4 | OFF | ON / ON | 1 / 1 | 🛑 | --- | --- | --- |
| | Sys5 | OFF | ON / ON | 1 / 1 | 🛑 | --- | --- | --- |
| | Sys6 | OFF | ON / ON | 1 / 1 | 🛑 | --- | --- | --- |
| | Sys7 | OFF | ON / ON | 1 / 1 | 🛑 | --- | --- | --- |

| Display tab | Item | Description | | | | | | | | | | | | | | | | |
|------------------|--|--|-------------|--------------|-------------|--|---------|------|-----------|--------------|----|------|----|--------------|---|------|--|--|
| Common | System name | System number between 1 and 16 | | | | | | | | | | | | | | | | |
| | Failure status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>⚠️</td> <td>A failure occurs. (Not displayed during normal operation.)</td> </tr> </tbody> </table> | Icon | Description | ⚠️ | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | |
| | Icon | Description | | | | | | | | | | | | | | | | |
| ⚠️ | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | | | | | | |
| Operation status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>Stopped</td> <td>ON</td> <td>Operating</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | OFF | Stopped | ON | Operating | | | | | | | | | |
| Icon | Description | Icon | Description | | | | | | | | | | | | | | | |
| OFF | Stopped | ON | Operating | | | | | | | | | | | | | | | |
| Status | Rmt sw | Displays the high-order interlock (ON) and individual independent (OFF) statuses of "System start-stop"/"System setting pattern" | | | | | | | | | | | | | | | | |
| | Setting Pattern | "Indication"/"Status" Setting pattern number between 1 and 8 | | | | | | | | | | | | | | | | |
| | Mode | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>❄️</td> <td>Cool</td> <td>❄️</td> <td>Cool storage</td> </tr> <tr> <td>☀️</td> <td>Heat</td> <td>☀️</td> <td>Heat storage</td> </tr> <tr> <td>🛑</td> <td>Stop</td> <td></td> <td></td> </tr> </tbody> </table> | Icon | Description | Icon | Description | ❄️ | Cool | ❄️ | Cool storage | ☀️ | Heat | ☀️ | Heat storage | 🛑 | Stop | | |
| | Icon | Description | Icon | Description | | | | | | | | | | | | | | |
| | ❄️ | Cool | ❄️ | Cool storage | | | | | | | | | | | | | | |
| | ☀️ | Heat | ☀️ | Heat storage | | | | | | | | | | | | | | |
| | 🛑 | Stop | | | | | | | | | | | | | | | | |
| Start up | Displays "ON" during execution | | | | | | | | | | | | | | | | | |
| Demand | Displays one of 3 levels, "LV1 to LV3" during execution | | | | | | | | | | | | | | | | | |
| PST shift | No function | | | | | | | | | | | | | | | | | |
| Measured value | PST | (°C) | | | | | | | | | | | | | | | | |
| | LRWT | (°C) | | | | | | | | | | | | | | | | |
| | LSWT | (°C) | | | | | | | | | | | | | | | | |
| | OAT | (°CDB) | | | | | | | | | | | | | | | | |
| | Load flw | (L/min) | | | | | | | | | | | | | | | | |
| | Unit flw | (L/min) | | | | | | | | | | | | | | | | |
| | Heat | (kW) | | | | | | | | | | | | | | | | |
| Input | Power(Unit) | (kW) | | | | | | | | | | | | | | | | |
| | Power(Pump) | (kW) | | | | | | | | | | | | | | | | |
| | COP (Unit) | Displays the COP (coefficient of performance) | | | | | | | | | | | | | | | | |
| Monthly report | Record date | Displays dates for 13 months, including the current month | | | | | | | | | | | | | | | | |
| | Heat | Adds together the integral loads of all systems and displays the sum on a daily basis (kWh) | | | | | | | | | | | | | | | | |
| | Power | Adds together the integral power of all systems and displays the sum on a daily basis (kWh) | | | | | | | | | | | | | | | | |

Notes

Note 1: During the execution of setting pattern automatic switching control, "Indication" and "Status" of the Setting Pattern differ.

8-5 Heat source device group statuses

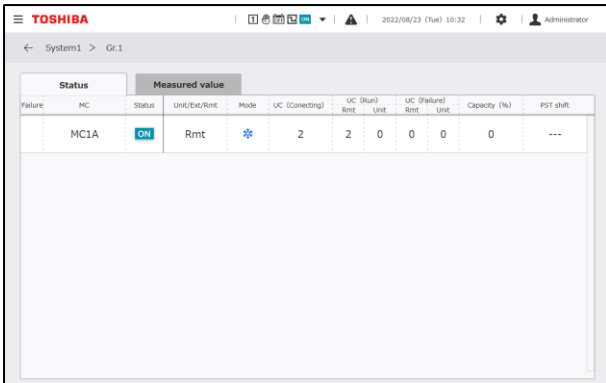
The statuses of the heat source device groups belonging to the selected system are displayed in a list.

| Status | | Measured value | | Input | | Monthly report | | | | | |
|--------|------------------|----------------|----------|-------|-----------|-----------------|-----------------|--------------|------|---------------|------|
| Fail | Heat source Grp. | State | Priority | Mode | PST shift | MC (Connecting) | UC (Connecting) | UC (Run) Rmt | Unit | UC (Fail) Rmt | Unit |
| | Gr.1 | ON | 1st | ❄️ | --- | 1 | 2 | 2 | 0 | 0 | 0 |
| | Gr.2 | OFF | 2nd | ❄️ | --- | 1 | 2 | 0 | 0 | 0 | 0 |
| | Gr.3 | OFF | 3rd | ❄️ | --- | 0 | 0 | 0 | 0 | 0 | 0 |
| | Gr.4 | OFF | 4th | ❄️ | --- | 0 | 0 | 0 | 0 | 0 | 0 |

| Display tab | Item | Description | | | | | | | | | | | | | | | | |
|-------------------------|---|---|-------------|--------------|-------------|--|---------|------|-----------|--------------|--|------|--|--------------|--|------|--|--|
| Common | Heat source device group information | Heat source device group number between 1 and 16 | | | | | | | | | | | | | | | | |
| | Failure status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>A failure occurs. (Not displayed during normal operation.)</td> </tr> </tbody> </table> | Icon | Description | | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | |
| | Icon | Description | | | | | | | | | | | | | | | | |
| | | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | | | | | |
| Operation status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Stopped</td> <td></td> <td>Operating</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Stopped | | Operating | | | | | | | | | |
| Icon | Description | Icon | Description | | | | | | | | | | | | | | | |
| | Stopped | | Operating | | | | | | | | | | | | | | | |
| Priority | Displays a priority between 1 and 4 (top priority: 1) | | | | | | | | | | | | | | | | | |
| Status | Mode | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Cool</td> <td></td> <td>Cool storage</td> </tr> <tr> <td></td> <td>Heat</td> <td></td> <td>Heat storage</td> </tr> <tr> <td></td> <td>Stop</td> <td></td> <td></td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Cool | | Cool storage | | Heat | | Heat storage | | Stop | | |
| | Icon | Description | Icon | Description | | | | | | | | | | | | | | |
| | | Cool | | Cool storage | | | | | | | | | | | | | | |
| | | Heat | | Heat storage | | | | | | | | | | | | | | |
| | | Stop | | | | | | | | | | | | | | | | |
| | PST shift | No function | | | | | | | | | | | | | | | | |
| Number of MCs connected | (units) | | | | | | | | | | | | | | | | | |
| Number of UCs connected | (units) | | | | | | | | | | | | | | | | | |
| Number of UCs running | (units) * For each of Rmt/Unit | | | | | | | | | | | | | | | | | |
| Number of UCs failing | (units) * For each of Rmt/Unit | | | | | | | | | | | | | | | | | |
| Measured value | PST | (°C) | | | | | | | | | | | | | | | | |
| | EWT | (°C) | | | | | | | | | | | | | | | | |
| | LWT | (°C) | | | | | | | | | | | | | | | | |
| | Unit flw | (L/min) | | | | | | | | | | | | | | | | |
| | Unit Cap | (kW) | | | | | | | | | | | | | | | | |
| Input | Power(Unit) | (kW) | | | | | | | | | | | | | | | | |
| | Power(Pump) | (kW) | | | | | | | | | | | | | | | | |
| | COP (Unit) | Displays the COP | | | | | | | | | | | | | | | | |
| Monthly report | Record date | Displays dates for 13months, including the current month | | | | | | | | | | | | | | | | |
| | Heat | Displays the integral load of the selected system on a daily basis (kWh) | | | | | | | | | | | | | | | | |
| | Power | Displays the integral power of the selected system on a daily basis (kWh) | | | | | | | | | | | | | | | | |
| | Integral power of pump | Displays the integral power of the pump of the selected system on a daily basis (kWh) | | | | | | | | | | | | | | | | |

8-6 MC statuses

The statuses of the MCs belonging to the selected heat source device group are displayed in a list.



| Display tab | Item | Description | | | | | | | | | | | | | | | | |
|-----------------------|---|---|-------------|--------------|-------------|--|---------|------|-----------|--------------|--|------|--|--------------|--|------|--|--|
| Common | MC name | MC number between 1 and 8 A/B | | | | | | | | | | | | | | | | |
| | Failure status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>A failure occurs. (Not displayed during normal operation.)</td> </tr> </tbody> </table> | Icon | Description | | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | |
| | Icon | Description | | | | | | | | | | | | | | | | |
| | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | | | | | | | | | |
| Operation status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Stopped</td> <td></td> <td>Operating</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Stopped | | Operating | | | | | | | | | |
| Icon | Description | Icon | Description | | | | | | | | | | | | | | | |
| | Stopped | | Operating | | | | | | | | | | | | | | | |
| Status | Unit/Ext/Rmt | Unit/External/Remote | | | | | | | | | | | | | | | | |
| | Mode | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Cool</td> <td></td> <td>Cool storage</td> </tr> <tr> <td></td> <td>Heat</td> <td></td> <td>Heat storage</td> </tr> <tr> <td></td> <td>Stop</td> <td></td> <td></td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Cool | | Cool storage | | Heat | | Heat storage | | Stop | | |
| | Icon | Description | Icon | Description | | | | | | | | | | | | | | |
| | | Cool | | Cool storage | | | | | | | | | | | | | | |
| | | Heat | | Heat storage | | | | | | | | | | | | | | |
| | | Stop | | | | | | | | | | | | | | | | |
| | Number of UCs connected | (units) | | | | | | | | | | | | | | | | |
| | Number of UCs running | (units) * For each of Rmt/Unit | | | | | | | | | | | | | | | | |
| Number of UCs failing | (units) * For each of Rmt/Unit | | | | | | | | | | | | | | | | | |
| Capacity | (%) | | | | | | | | | | | | | | | | | |
| PST shift | No function | | | | | | | | | | | | | | | | | |
| Measured value | PST | (°C) | | | | | | | | | | | | | | | | |
| | Shift value | No function | | | | | | | | | | | | | | | | |
| | EWT | (°C) | | | | | | | | | | | | | | | | |
| | LWT | (°C) | | | | | | | | | | | | | | | | |
| | Flow | (L/min) | | | | | | | | | | | | | | | | |
| | Cap | (kW) | | | | | | | | | | | | | | | | |
| | Input | (kW) | | | | | | | | | | | | | | | | |
| COP (Unit) | Displays the COP | | | | | | | | | | | | | | | | | |

8-7 UC statuses

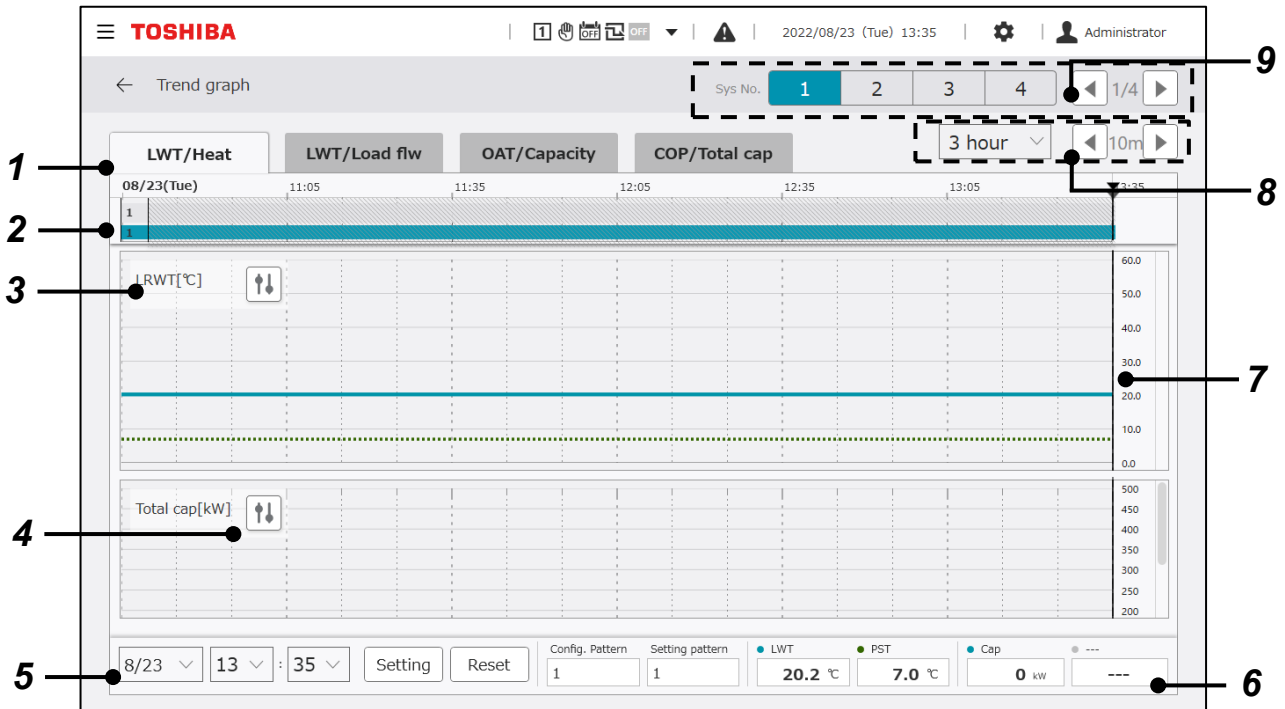
The statuses of the UCs belonging to the selected MC are displayed in a list.

| Failure | UC | Status | Unit/Rmt | Mode | Ope Capa | Failure crit | Fault code |
|---------|-----|--------|----------|------|----------|--------------|------------|
| | UC1 | ON | Rmt | ❄️ | 0 | --- | --- |
| | UC2 | ON | Rmt | ❄️ | 0 | --- | --- |

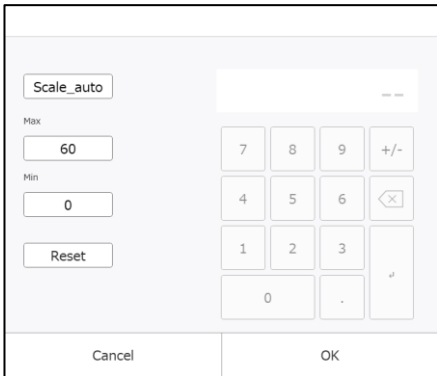
| Display tab | Item | Description | | | | | | | | |
|------------------|---|---|-------------|-------------|-------------|--|---------|------|-----------|------|
| Common | UC name | UC number between 1 and 16 | | | | | | | | |
| | Failure status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>A failure occurs. (Not displayed during normal operation.)</td> </tr> </tbody> </table> | Icon | Description | | A failure occurs. (Not displayed during normal operation.) | | | | |
| | | Icon | Description | | | | | | | |
| | A failure occurs. (Not displayed during normal operation.) | | | | | | | | | |
| Operation status | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Stopped</td> <td></td> <td>Operating</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Stopped | | Operating | |
| Icon | Description | Icon | Description | | | | | | | |
| | Stopped | | Operating | | | | | | | |
| Status | Unit/Rmt | Unit/Remote | | | | | | | | |
| | Mode | <table border="1"> <thead> <tr> <th>Icon</th> <th>Description</th> <th>Icon</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>Cool</td> <td></td> <td>Heat</td> </tr> </tbody> </table> | Icon | Description | Icon | Description | | Cool | | Heat |
| | | Icon | Description | Icon | Description | | | | | |
| | | Cool | | Heat | | | | | | |
| | Ope Capa | (%) | | | | | | | | |
| | Failure crit | Displays a failure circuit between A and D (if none: ---) | | | | | | | | |
| Fault code | Displays a fault code (if none: ---) | | | | | | | | | |
| Measured value | OAT | (°CDB) | | | | | | | | |
| | EWT | (°C) | | | | | | | | |
| | LWT | (°C) | | | | | | | | |
| | Flow | (L/min) | | | | | | | | |
| | Cap | (kW) | | | | | | | | |
| | Power(Unit) | (kW) | | | | | | | | |
| | Power(Pump) | (kW) | | | | | | | | |
| | COP (Unit) | Displays the COP | | | | | | | | |
| Circuit Info | Compressor | Displays the operation statuses of the compressors of circuits A to D inside the UC (OFF/ON) | | | | | | | | |
| | Num of runs | Displays the numbers of runs of the compressors of circuits A to D inside the UC (number of runs) | | | | | | | | |
| | Operation time | Displays the integral operation times of the compressors of circuits A to D inside the UC (h) | | | | | | | | |

8-8 Trend graph

Trend data for the day before the view day up to the present time can be viewed in a graph format. Graph data is automatically updated with the passage of time.



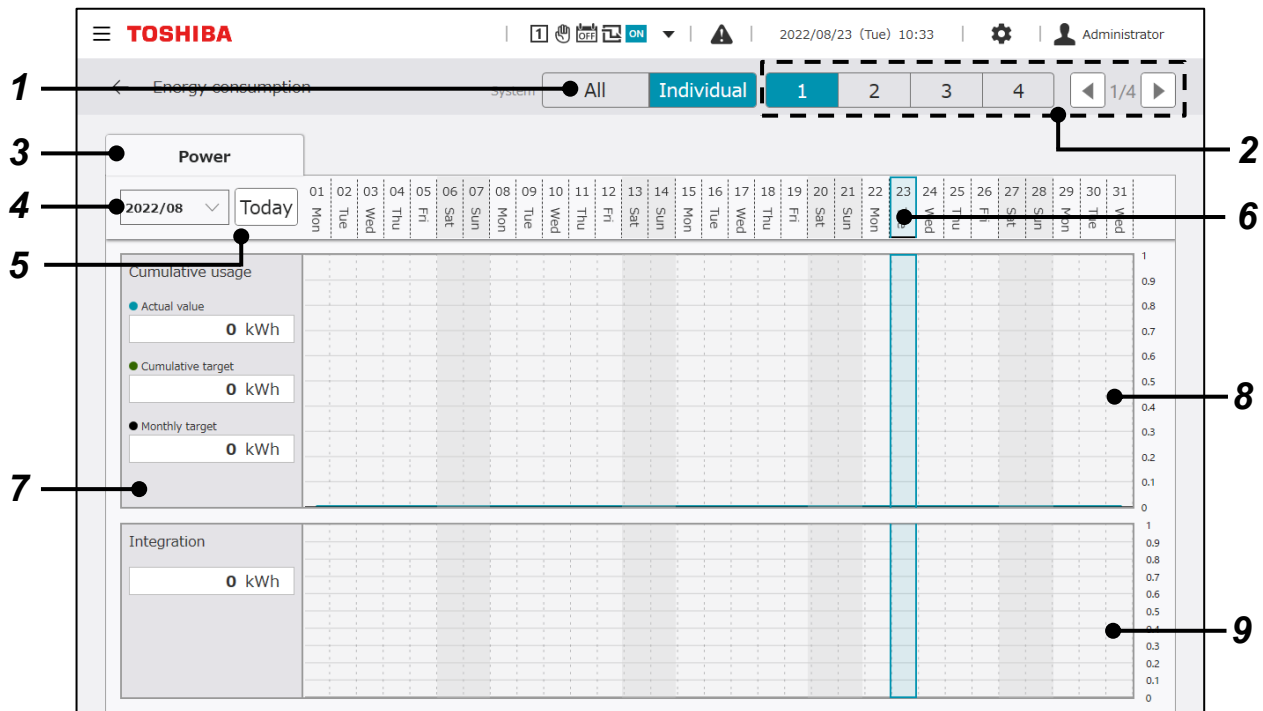
Display items

| No | Item | Function |
|----|--------------------------------|--|
| 1 | Graph selection | Select the tab of the graph to display with touch operation. |
| 2 | Operation status display | Displays the config. pattern number, setting pattern number, and run/stop status. |
| 3 | Graph name display | Indicates the name of the graph displayed. |
| 4 | Graph display operation button | <p>Display the Y-axis range adjustment panel for the target graph with touch operation.</p> <p>Y-axis range adjustment panel Set the display range (maximum and minimum) of the graph data Y-axis. Use the "Scale_auto" button to automatically set the display range from the data width. Use the "Reset" button to discard the input values and set the initial values. Use the "OK" button to confirm the changes and close the panel. The changes are then reflected in the graph. Use the "Cancel" button to discard the changes and close the panel.</p>  |

| No | Item | Function | | | | | | | | | | | | |
|---|---|---|--|--------------|----------------------|--|--|---|-------------------------------|--|---|---|-------------------------|---|
| 5 | Data display time setting | Set the time for which to display data. | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Display graph</th> <th>Item</th> </tr> </thead> <tbody> <tr> <td>Date selection</td> <td>Set the date for which to display data</td> </tr> <tr> <td>Time settings</td> <td>Set the time for which to display data</td> </tr> <tr> <td>Setting button</td> <td>Fix the display data at the set time</td> </tr> <tr> <td>Reset button</td> <td>Cancel the set time and synchronises the display data at the present time</td> </tr> </tbody> </table> | Display graph | Item | Date selection | Set the date for which to display data | Time settings | Set the time for which to display data | Setting button | Fix the display data at the set time | Reset button | Cancel the set time and synchronises the display data at the present time | | |
| | | Display graph | Item | | | | | | | | | | | |
| | | Date selection | Set the date for which to display data | | | | | | | | | | | |
| | | Time settings | Set the time for which to display data | | | | | | | | | | | |
| Setting button | Fix the display data at the set time | | | | | | | | | | | | | |
| Reset button | Cancel the set time and synchronises the display data at the present time | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 6 | Selected data display | Displays data for "Data display time". | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Display graph</th> <th>Display data</th> </tr> </thead> <tbody> <tr> <td>Common to all graphs</td> <td>Config. pattern Setting Pattern</td> </tr> <tr> <td>Outlet temperature/Total heat capacity</td> <td>Graph (top): Outlet temperature, set temperature Graph (bottom): Heat source side capability</td> </tr> <tr> <td>Outlet temperature/Total flow</td> <td>Graph (top): Outlet temperature, set temperature Graph (bottom): Load flow, heat source device total flow</td> </tr> <tr> <td>Outside air temperature/Total heat capacity</td> <td>Graph (top): Outside air temperature Graph (bottom): Heat source side capability</td> </tr> <tr> <td>COP/Total heat capacity</td> <td>Graph (top): COP Graph (bottom): Heat source side capability</td> </tr> </tbody> </table> | Display graph | Display data | Common to all graphs | Config. pattern Setting Pattern | Outlet temperature/Total heat capacity | Graph (top): Outlet temperature, set temperature Graph (bottom): Heat source side capability | Outlet temperature/Total flow | Graph (top): Outlet temperature, set temperature Graph (bottom): Load flow, heat source device total flow | Outside air temperature/Total heat capacity | Graph (top): Outside air temperature Graph (bottom): Heat source side capability | COP/Total heat capacity | Graph (top): COP Graph (bottom): Heat source side capability |
| | | Display graph | Display data | | | | | | | | | | | |
| | | Common to all graphs | Config. pattern Setting Pattern | | | | | | | | | | | |
| | | Outlet temperature/Total heat capacity | Graph (top): Outlet temperature, set temperature Graph (bottom): Heat source side capability | | | | | | | | | | | |
| | | Outlet temperature/Total flow | Graph (top): Outlet temperature, set temperature Graph (bottom): Load flow, heat source device total flow | | | | | | | | | | | |
| Outside air temperature/Total heat capacity | Graph (top): Outside air temperature Graph (bottom): Heat source side capability | | | | | | | | | | | | | |
| COP/Total heat capacity | Graph (top): COP Graph (bottom): Heat source side capability | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 7 | Time bar | Indicates the focus time (set time) on the time line. In the case of "Synchronising the display data at the present time", the data time nearest the present time of the 5-minute interval data is automatically updated. | | | | | | | | | | | | |
| 8 | Display time change setting | Change the graph display range with the selected time axis. | | | | | | | | | | | | |
| 9 | System switching buttons | Select the system for which to display data on the trend graph. When the screen is displayed first, the system number selected on the previous screen is selected. | | | | | | | | | | | | |
| 10 | Enlargement operation | Touching the trend graph area causes the scale of the vertical axis to be enlarged. | | | | | | | | | | | | |

8-9 Energy consumption graph

The monthly integral consumption for each energy type can be viewed on the graph. Changes in integral consumption with respect to the target value are visualised.



Display items

| No | Item | Function |
|----|---|---|
| 1 | All systems/individual system switching buttons | Switch to the screen for viewing data for all systems by touching the "All" button. Switch to the display for each system by touching the "Individual" button. |
| 2 | System switching buttons | Select the system for which to display data on the trend graph. * Cannot be used when data for all systems is viewed. |
| 3 | Graph display for each energy type | Displays the graph for the energy type displayed in the tab. |
| 4 | Graph display month selection | Select the month for which to display data in the graph. You can select from 13 months, including the current month. |
| 5 | Today button | Select and display the view day with touch operation. |
| 6 | Date selection button | Select a day for which to display data with touch operation. For the column of the selected day, the background is shown in blue. The initial selection for the day for which to display data is the current day. |
| 7 | Selected date data display | Displays the data of the selected day. In the monthly Cumulative usage display, "Actual value/Cumulative target/Monthly target" are displayed. In the daily usage display, the "Usage" is displayed. |
| 8 | Monthly cumulative usage graph | The actual value and the target value of the cumulative usage are displayed on the graph. When data for all systems is viewed, the total usage of all systems is displayed on the graph. When data for an individual system is viewed, the usage for that system is displayed on the graph. |
| 9 | Daily usage graph | Displays the energy consumption for each date of the selected year and month on the graph. When data for all systems is viewed, the total usage of all systems is displayed on the graph. When data for an individual system is viewed, the usage for that system is displayed on the graph. |

8-10 Failure History

Failure History You can narrow down history by doing a conditional search.

| Date & Time | MC | UC | Circuit | Code | Content |
|------------------|-----|-----|---------|------|----------------------|
| 2022/08/23 10:35 | MC1 | UC1 | A | 0x65 | Refrigerant shortage |
| 2022/08/23 10:33 | MC1 | --- | --- | 0x1A | Human IF comm error |
| 2022/08/23 10:31 | MC1 | --- | --- | 0x02 | Pump interlock |
| 2022/08/23 09:56 | MC1 | --- | --- | 0x02 | Pump interlock |
| 2022/08/04 14:49 | MC1 | UC1 | A | 0x65 | Refrigerant shortage |
| 2022/08/04 14:46 | MC1 | --- | --- | 0x12 | Int. comm error |

Display items

| No | Item | Function |
|----|----------------------------------|---|
| 1 | Date & Time period specification | Specify the start date and end date used to narrow down history. Display the calendar panel with touch operation. |
| 2 | Failure point | Specify the target where failures occurred. |
| 3 | Narrow down button | When operated, extracts failure history data under the conditions specified for items 2 and 3 and redisplay the data. |
| 4 | Reset button | When operated, resets the specified search conditions and redisplay all history data. |
| 5 | Failure output reset | When operated, stops the failure output. |
| 6 | Failure history data display | Displays failure history in a list. Display items are "Failure occurrence date and time, occurrence target (GC or MC), occurrence target (UC), occurrence target circuit name/coil system, fault code, and failure description". |

Fault code (for RBP-GC004TP-E only)

| Fault code | Description | Cause | Action |
|------------|------------------------------|--|-------------------------------|
| 0x12 | Internal communication error | Disconnected communication wire/loose terminal | Repair the communication wire |
| | | Communication port failure | Replace the BOXPC |
| | | I/O board failure | Replace the I/O board |

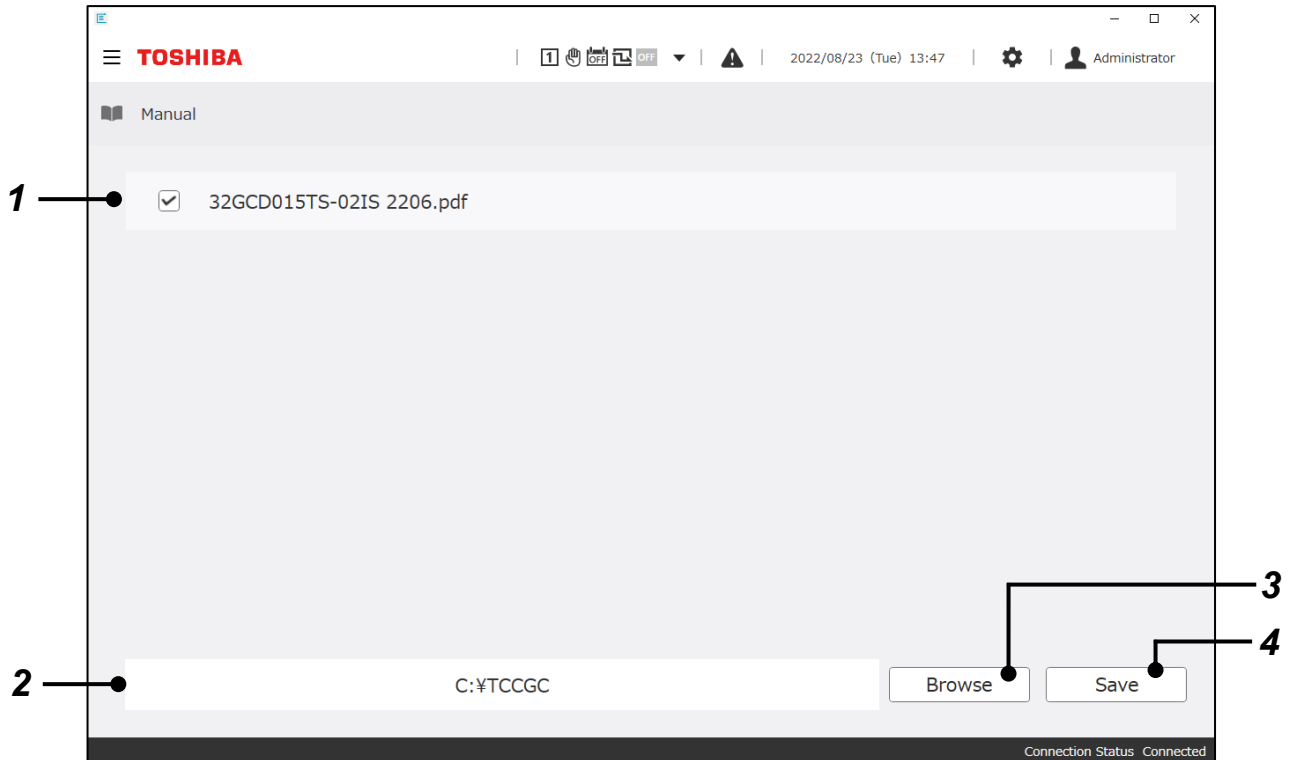
Notes

Note 1: For models for which year information is not included in failure history, the occurrence year will differ when 2 years pass after occurrence.

Note 2: For information about fault codes other than that of RBP-GC004TP-E, see the owner's manual for the device used.

9 Manual Download

The manual (this manual) can be downloaded. This function can be used only with the PC monitor app.



Display items

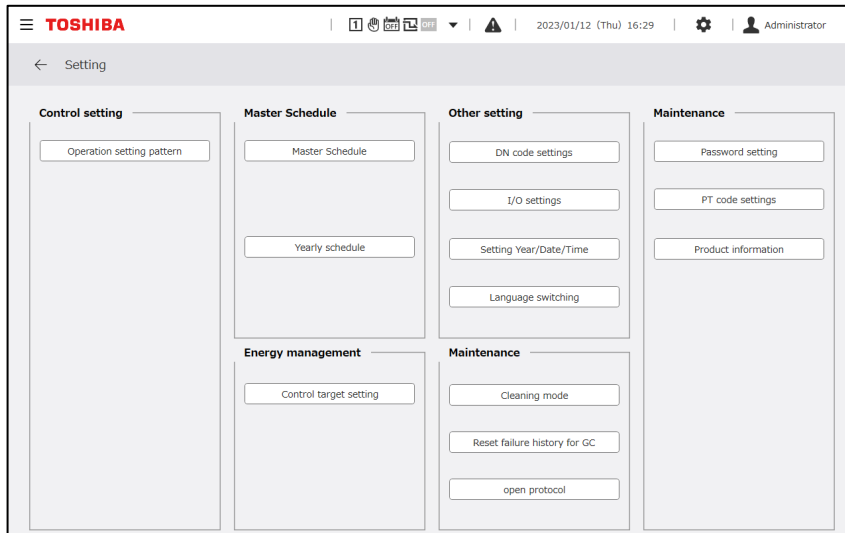
| No | Item | Function |
|----|---------------------|---|
| 1 | File selection | Select the manual to download. |
| 2 | Save folder display | Displays the save folder specified by operating the Browse button. |
| 3 | Browse button | Select the folder to which to download the file. The save folder setting dialogue box is displayed by operating the Browse button. |
| 4 | Save button | Saves the selected manual to the specified save folder. Save confirmation message <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Do you want to save it?</p> <p>Cancel OK</p> </div> Save completion message <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Data acquisition is complete</p> <p>OK</p> </div> |

10 Various Settings

10-1 Top setting screen

From the setting button , the top setting screen can be displayed.

Links to screens for setting the various functions related to the system are collected here.



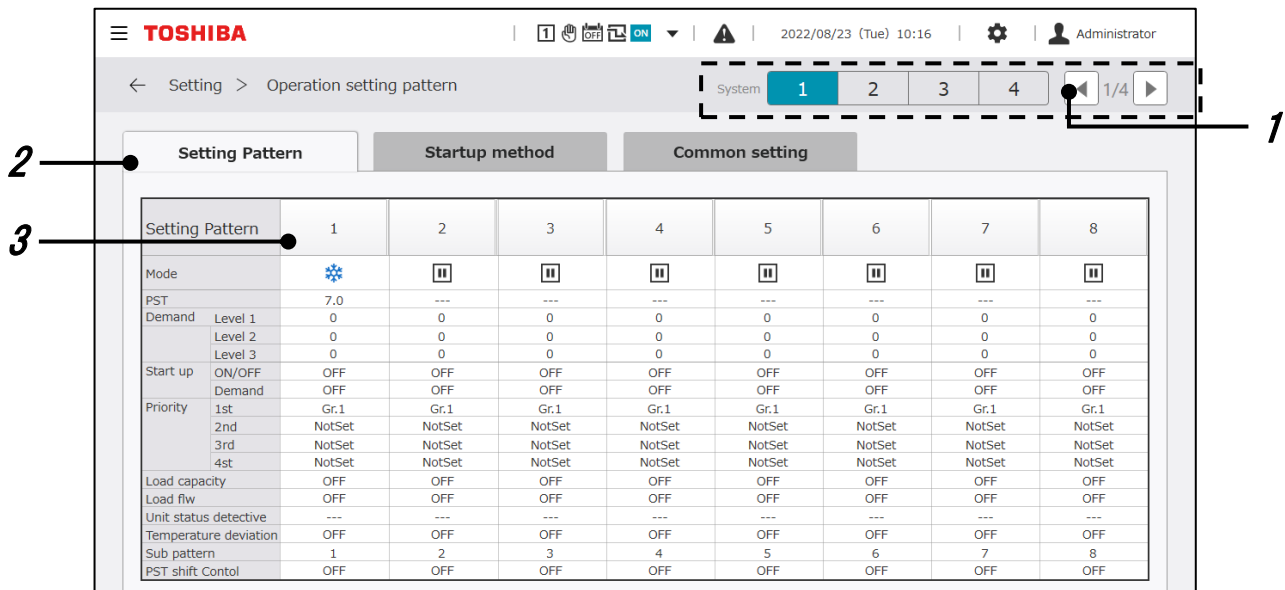
10-2 Control setting and functions

Notes

Note 1: Setting pattern automatic switching and setting pattern schedule setting can be used only with an RBP-GC004TP-E-compliant module.

Setting pattern setting

Settings common to all systems and related to the setting patterns for each system can be made. The settings of the selected setting pattern are reflected in control.



Display items

| No | Item | Function |
|----|---|---|
| 1 | System switching buttons | Switch the system to display. |
| 2 | Tab selection | Select the setting screen to display with touch operation. Display tab items Setting Pattern (this screen) Startup method Common setting |
| 3 | Setting pattern setting status and edit pattern number selection (Detail setting screen display) | When the tab "Setting Pattern" is selected, some of the items of the present setting pattern settings are displayed in a list. Select the number of the setting pattern whose settings are to be changed with touch operation and display the setting pattern detail setting screen. Display tab items in the setting pattern detail setting screen Mode, PST, Demand Start up control Group control Setting pattern control |

Mode, PST, and Demand

The operation mode, set temperature, and demand value to apply to each setting pattern when it is selected can be set.

Demand

The GC enables you to set 3 levels of demand.

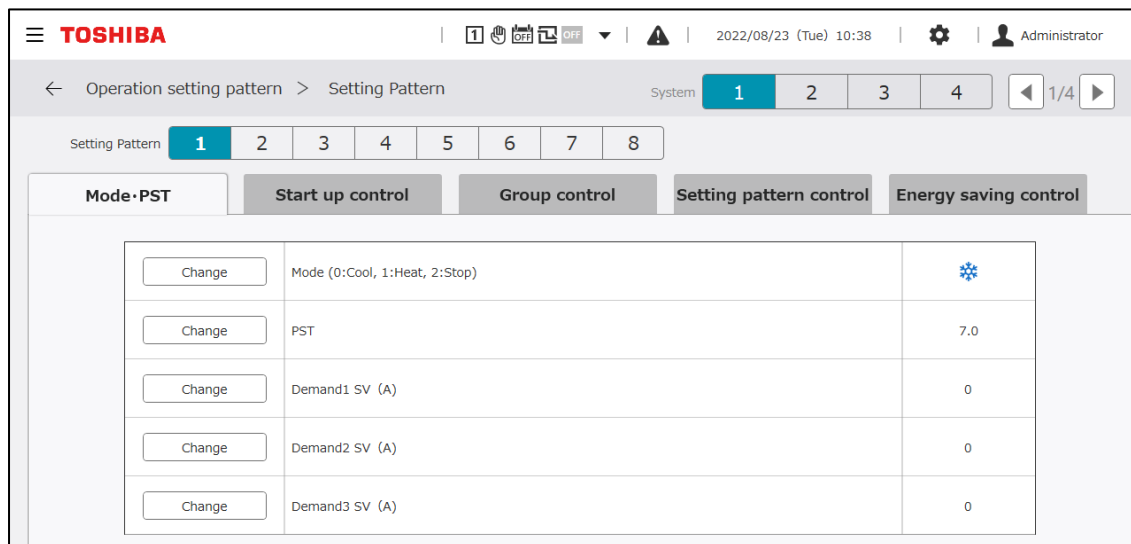
The setting values for each demand level can be set for each setting pattern and for each system.

The GC enables you to select from 5 demand restriction methods.

Set a demand restriction method on the setting screen for setting patterns common to all systems.

| Demand restriction method | Description of restriction |
|-----------------------------|---|
| Amps (A) | Restricts the current so that the set current value will not be exceeded. |
| Cap (%) | Runs devices to meet the set ratio. |
| Rated power ratio (%) | Limits the power value by a set percentage of rated power consumption. |
| Power consumption ratio (%) | Restricts the power consumption at the start of demand control to meet the set ratio. |
| Power (kW) | Restricts the power so as not to exceed the set power value. |

Settings can be changed on the screen below.



Setting items

| Display tab | Item | Description of setting |
|-------------------|--------------------------------------|--|
| Mode, PST, Demand | Mode | Cool/Cool storage/Heat/Heat storage/Stop |
| | Set temperature (cooling/heating) | -15 to 60 [°C] |
| | Demand between 1 and 3 Setting value | %/A/kW * By setting a demand restriction method, the unit used can be changed. Set a demand restriction method on the setting screen for setting patterns common to all systems. |

Notes

Note 1: The initial value for the demand ratio setting value of USX is "0". Be careful because if demand control is enabled with the initial value of "0", the units will stop.

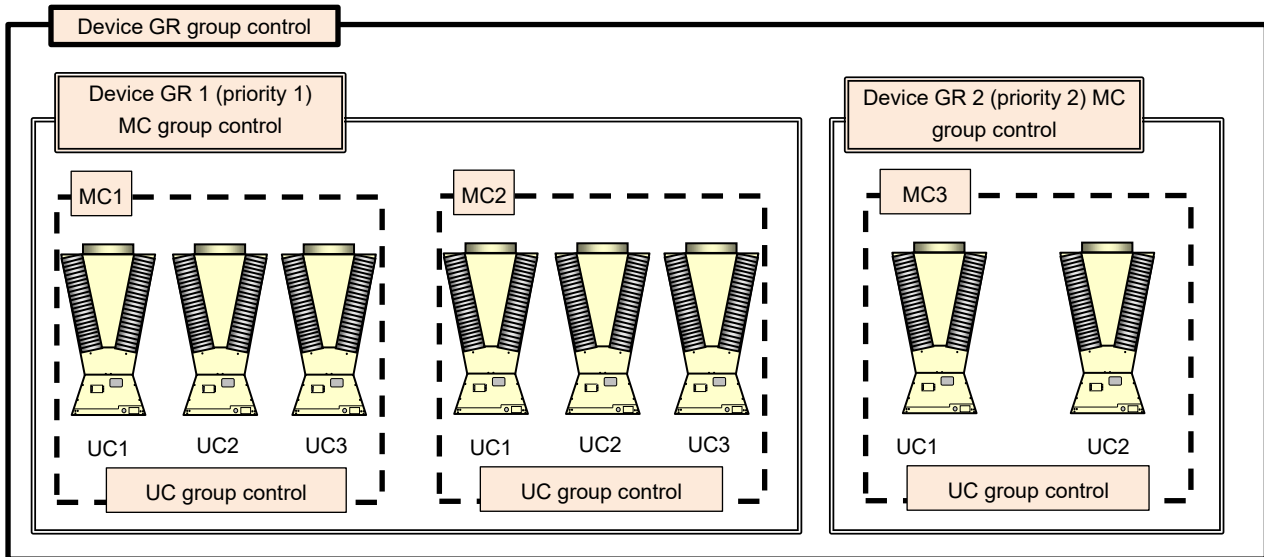
Note 2: For the demand control methods, functional restrictions may occur depending on the MC and UC software version.

Note 3: During startup control, the demand settings for startup control are followed.

Group control

Targets of group control by the use of the GC are managed on the 3 layers below.

- Device GR group control
- MC group control
- UC group control



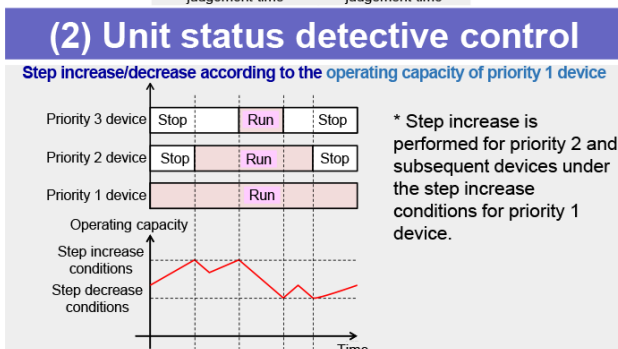
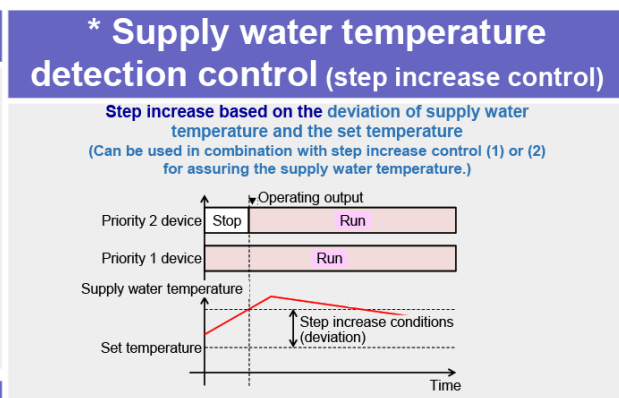
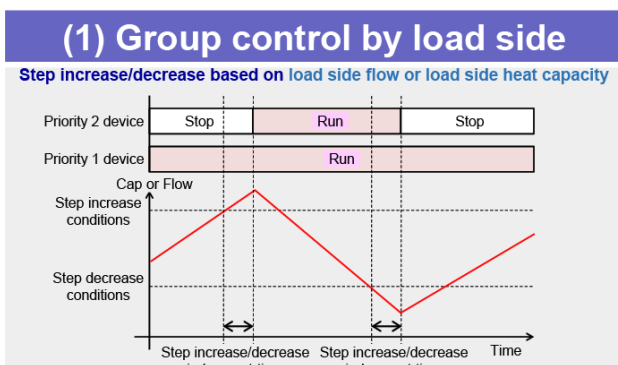
Device GR group control

For group control for the device GR belonging to a system, the 2 methods below can be combined. Priorities of up to 4 can be set.

- (1) Group control by load side: Step increase/decrease based on load side flow or load side heat capacity
- (2) Unit status detective control: Step increase/decrease control according to the operating capacity of priority 1 device

To ensure that the supply water temperature is maintained the methods below can also be combined.

- * Supply water temperature detection control: Step increase based on the deviation of the supply water temperature and the set temperature



Notes

Note 1: For HS GR group control, priorities are set, so that rotation cannot be performed.

Group control shown in Table 1 can be selected depending on whether or not a temperature sensor or flow meter is installed.

Table 1: Group control and input/output table

(* Only for devices that can be switched between cool and heat modes)

○:Necessary,△: To increase precision,—:Not necessary

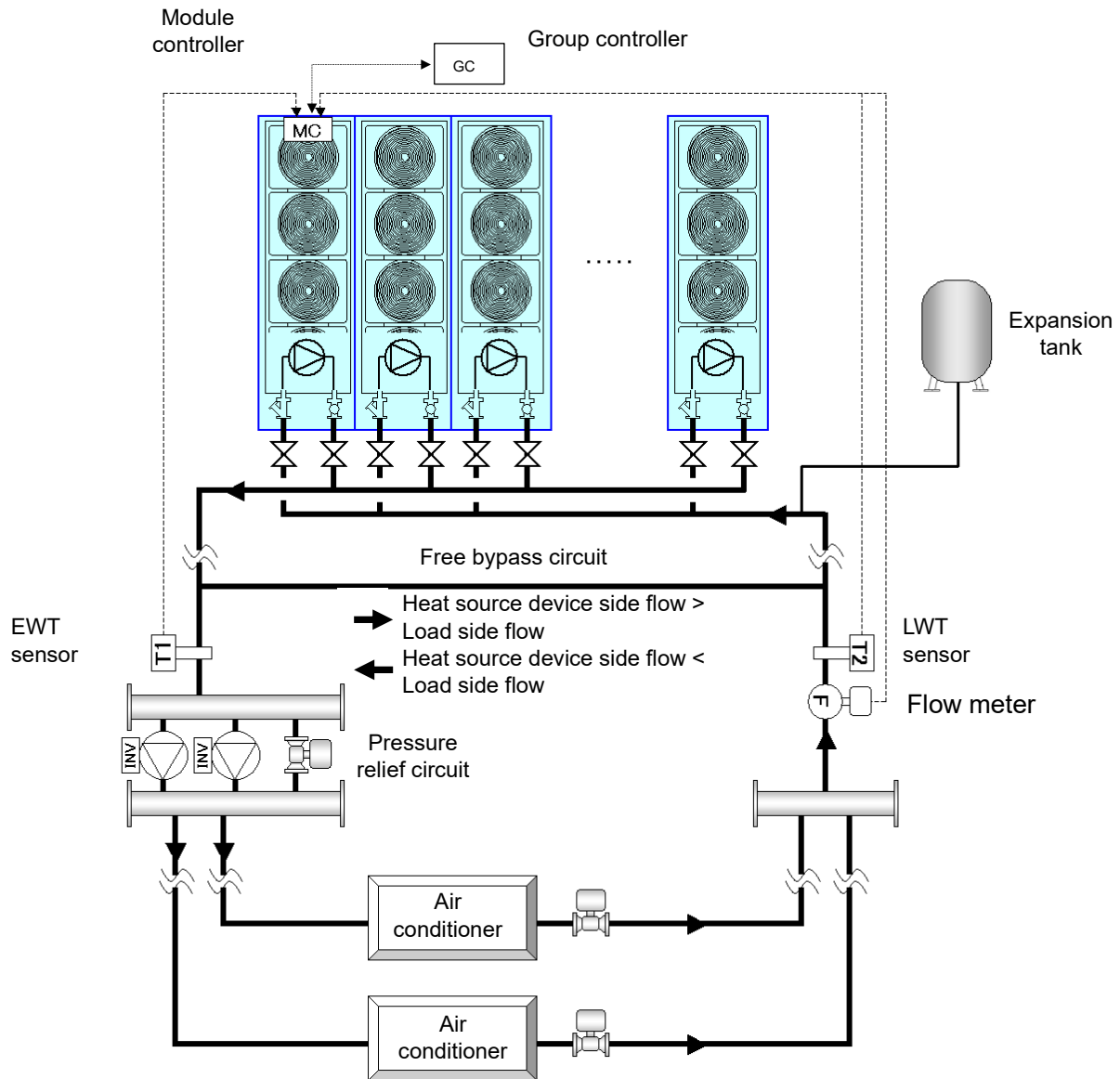
| | Group control by load side(capacity) | Group control by load side(flow) | Unit status detective control |
|--------------------------|--------------------------------------|----------------------------------|-------------------------------|
| Supply water Temperature | ○ | △ | △ |
| Return water Temperature | ○ | — | — |
| Flow meter | △ | △ | — |

Table 2: Sensor specifications

| Component name | Specifications | Quantity | Local procurement | Input destination | Field work |
|--|---|----------|-------------------------------------|----------------------------------|------------|
| Return and supply water sensor Either (1) or (2) is necessary | (1) External sensor (thermistor) | 2 | Supplied with the module controller | Representative module controller | ○ |
| | (2) Voltage or current output Note) | 2 | ○ | Representative module controller | ○ |
| Flow meter | Capable of instantaneous measurement and must support voltage or current output Note) (The 0 to 5.0 VDC span of the input range must be adjustable.) | 1 | ○ | Representative module controller | ○ |

Notes

For details of the settings for each sensor, see the installation manual and owner's manual for the module controller.



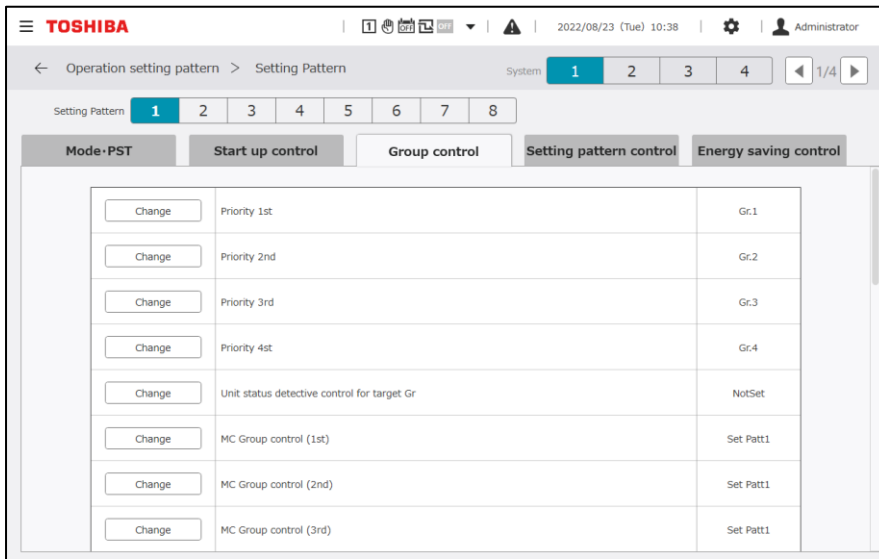
MC group control

You can select between the running of all MCs belonging to the device GR and the execution of group control. When MC group control is selected, group control is performed in MC units based on the operating capacity of MCs, and rotation control is performed so that the running time of each MC is averaged.

UC group control

MCs perform UC group control and indicate the flow required for the built-in inverter pump (or indicates the necessary running frequency) based on the load side flow and the UC operating capacity. Rotation control is performed to average the running time of each UC.

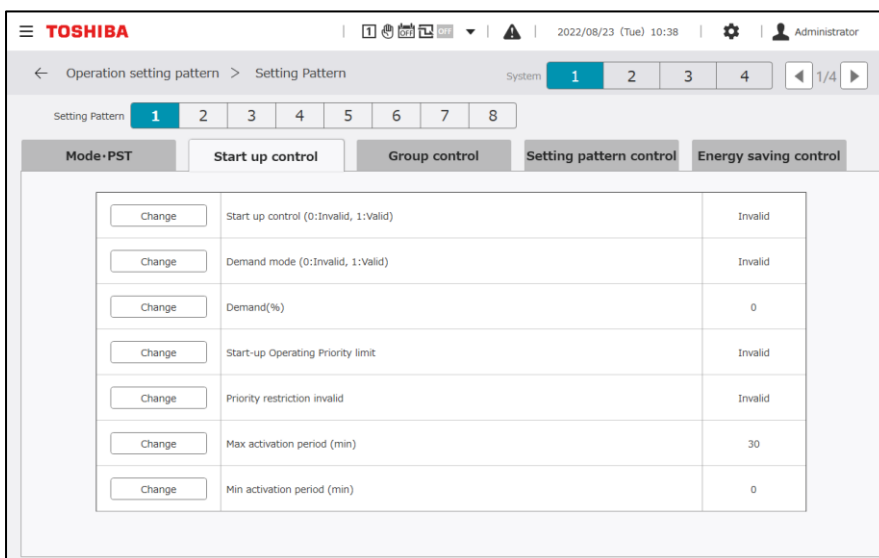
Setting values can be changed from the screen below.
 Changing setting values is performed by a service person Contact us.



Start up

After system run is specified, you can restrict the set demand value for a certain period of time or restrict possible running priorities. You can use this if you want to restrict the excessive running of heat source devices immediately after system startup or if you want to accelerate startup. While startup control is ON, "Supply water temperature detection control" is disabled.

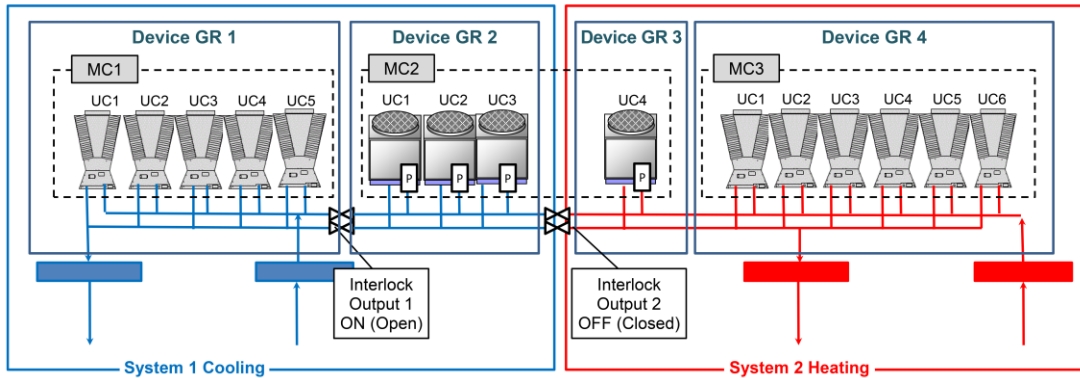
Setting values can be changed from the screen below.
 Changing setting values is performed by a service person. Contact us.



Setting pattern automatic switching control

By defining setting patterns for each system and switching between the setting patterns based on the load side heat capacity, load side flow, and outside air temperature, you can switch control setting values at once, such as cooling/heating, set temperature, running priorities, group control method, demand setting values, and startup method.

Config. pattern 1: Cooling priority



Example of registering the setting patterns for system 1

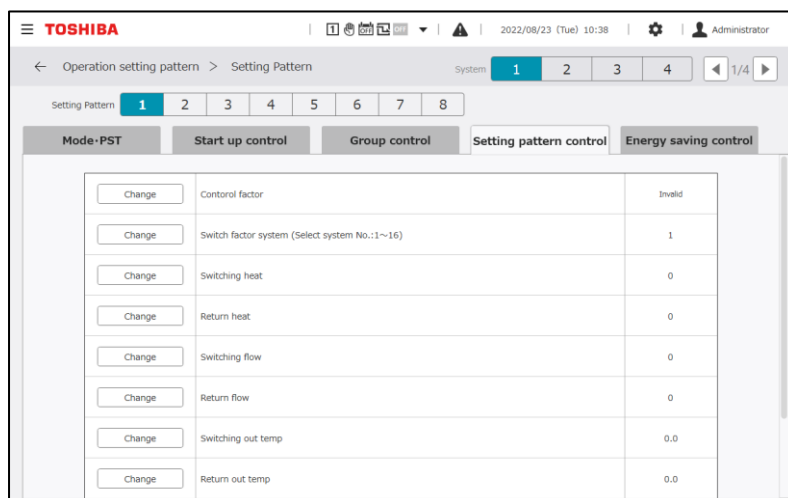
| Setting Pattern | 1 | 2 | 3 |
|-----------------|-------------|-------------|-------------|
| Mode | Cool | Cool | Cool |
| PST | 7.0 | 7.0 | 7.0 |
| Demand 1 | 90 | 80 | 90 |
| Demand 2 | 80 | 70 | 80 |
| Demand 3 | 70 | 60 | 70 |
| Priority 1 | Device GR 1 | Device GR 1 | Device GR 2 |
| Priority 2 | Device GR 2 | Device GR 2 | Device GR 1 |
| Priority 3 | NotSet | NotSet | NotSet |
| Priority 4 | NotSet | NotSet | NotSet |

- Setting pattern setting items

 - Mode
 - PST
 - Demand value
 - Priority
 - Group control method

etc.

Setting values can be changed from the screen below. Changing setting values is performed by a service person. Contact us.



Notes

- Note 1: Depending on the MC software version, it may not be possible to use setting pattern automatic switching control.
- Note 2: It is necessary to secure consistency with the allocation of each UC and the interlock valve that are set with the config. pattern.
- Note 3: Two device GRs divided within an MC cannot belong to the same system.

Note 4: If heat mode is specified for a cooling-only device, it will be stopped.

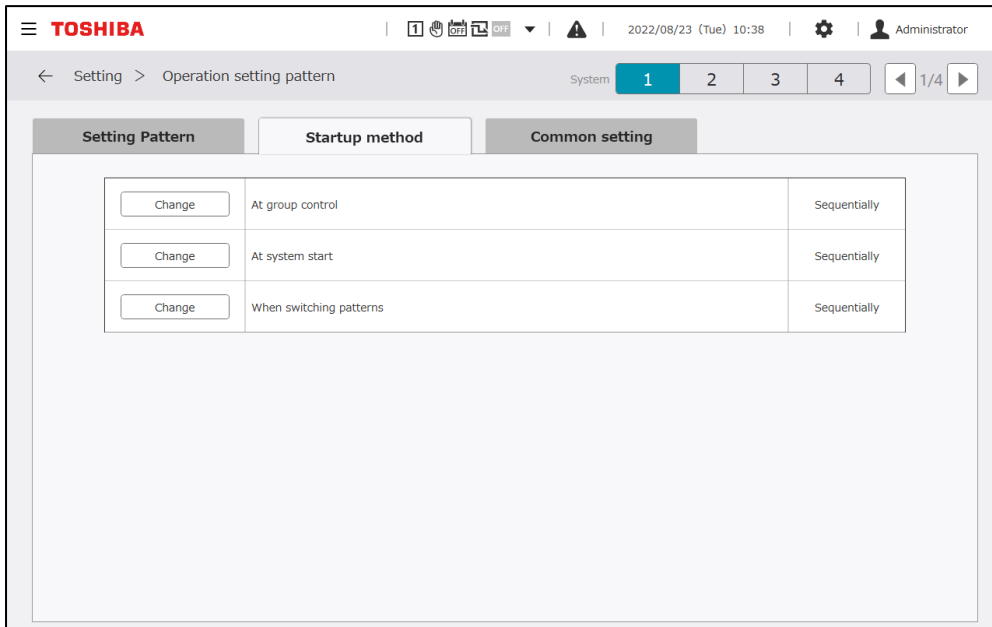
Startup method for each system

Set a heat source device startup method.

You can select sequential startup or synchronous startup of heat source devices at the time of group control application, at system start, and pattern switching.

Setting values can be changed from the screen below.

Changing setting values is performed by a service person. Contact us.



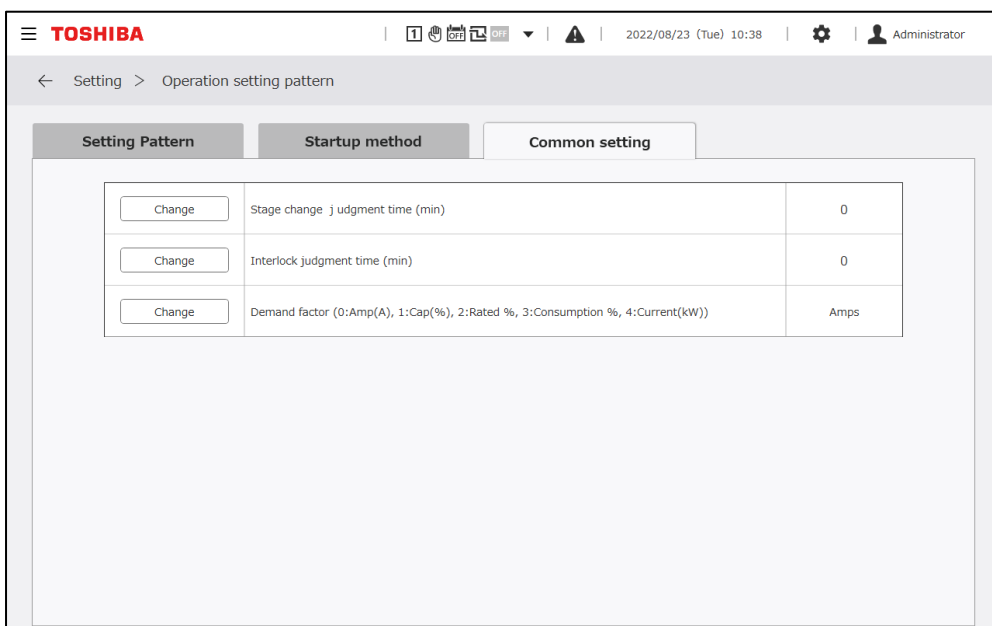
Setting of setting patterns common to all systems

Setting items common to all systems and all setting patterns.

(Common step increase/decrease judgement time, interlock output settlement time, and demand restriction method)

Setting values can be changed from the screen below.

Changing setting values is performed by a service person. Contact us.



10-3 Schedule Settings

This consists of the boilerplate, “Master schedule”, “Yearly schedule” for specifying the dates on which to execute the master schedule, and the “Actual schedule” for managing the most recent 7 days, including a view day.

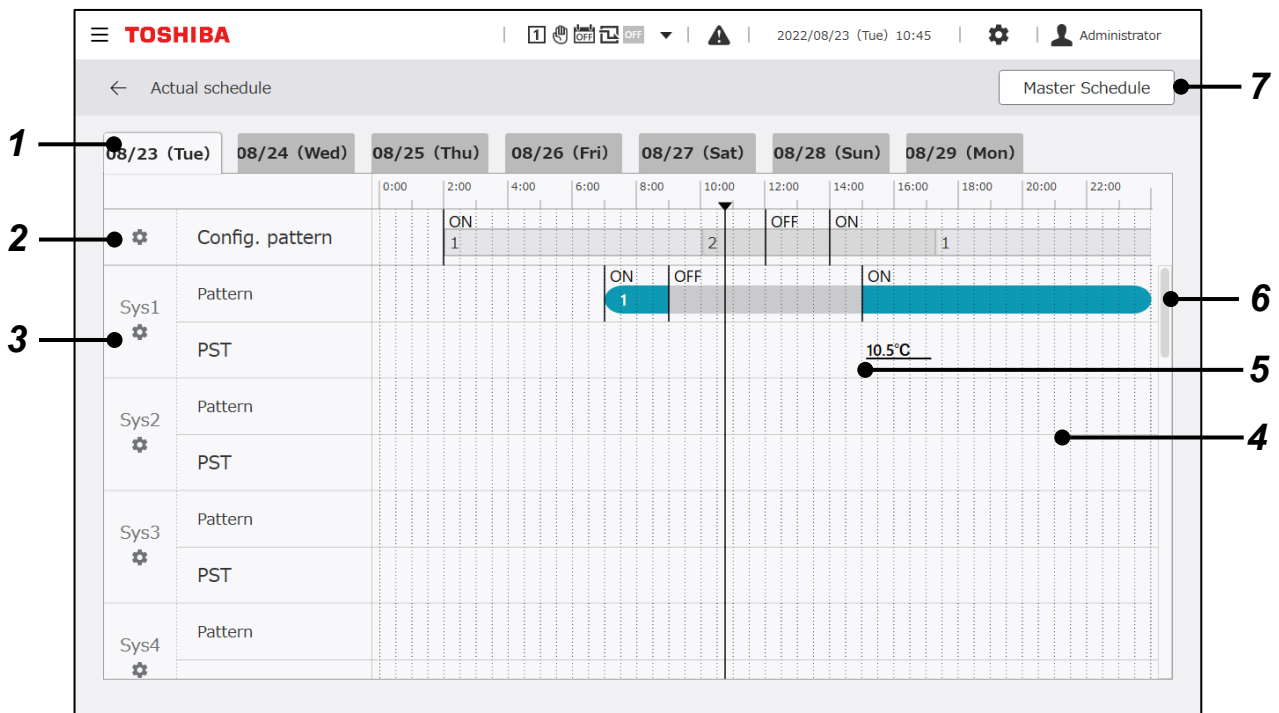
When dates are changed, for example, the setting of the dates on which no actual schedule is set is automatically expanded from the yearly schedule and the master schedule.

Notes

Note 1: Do not perform schedule setting operation before and after the date change.
 If the screen for editing schedule is opened immediately before date change, operation is forcibly terminated.

Actual schedule

The schedule for the most recent 7 days, including the view day, can be viewed, and the settings can be changed.



Display items

| No | Item | Function |
|----|--|--|
| 1 | Selection of schedule to view and edit | Displays the 7 days, including the view day. Switch the date to view and edit by touching the tab. |
| 2 | System schedule editing | You can set a schedule of config. patterns and the run/stop events of all systems. Display the setting change panel with touch operation. If the selected system pattern/run operation method is high-order interlock, System schedule is applied to each system. (See 8-3 for details.) |
| 3 | Editing of each system schedule | You can set a schedule of setting patterns, run/stop events, and set temperature-changing events for each system. Display the setting change panel with touch operation. If the selected system pattern/run operation method is individual, Each system schedule is applied to each system. (See 8-3 for details.) |
| 4 | Setting schedule display area | Displays the contents of the currently set schedule on the time line. |

| No | Item | Function |
|----|----------------------|---|
| 5 | Present time display | Indicates the present time on the time line. |
| 6 | Scroll bar | Scrolls up and down the schedule display area. |
| 7 | Master Schedule | Obtain the contents of the master schedule with touch operation and expand them to the actual schedule. |

Items that can be edited in the actual schedule

| | |
|---------------|---|
| Entire system | <ul style="list-style-type: none"> • Config. pattern • GC run/stop event |
| Each system | <ul style="list-style-type: none"> • Setting Pattern • Run/stop event • System set temperature |

Master schedule

Edit the contents of the “Weekly schedule” and the “Special schedule” to select with yearly schedule settings.

Display items

| No | Item | Function |
|----|--|---|
| 1 | Weekly schedule and special schedule switching | Switch the display between weekly schedule and special schedule with touch operation. |
| 2 | Weekly schedule and special schedule selection | When Weekly is selected, select the weekly schedule to edit from WK1 to WK5. When Special is selected, select from Special1 to Special5. |
| 3 | GC schedule editing | You can set a schedule of config. patterns and the run/stop events of the GC. Display the setting change dialogue box with touch operation. |
| 4 | Editing of each system schedule | You can set a schedule of setting patterns, run/stop events, and set temperature-changing events for each system. Display the setting change dialogue box with touch operation. |

| No | Item | Function |
|----|-------------------------------|---|
| 5 | Setting schedule display area | Displays the contents of the currently set schedule on the time line. |
| 6 | Day of the week selection | When Weekly is selected, select the day of the week to edit. |

Items that can be edited with the master schedule (weekly schedule/special schedule)

| | |
|---------------|--|
| Entire system | <ul style="list-style-type: none"> • Config. pattern • GC run/stop event |
| Each system | <ul style="list-style-type: none"> • Setting Pattern • Run/stop event |

Edit screen

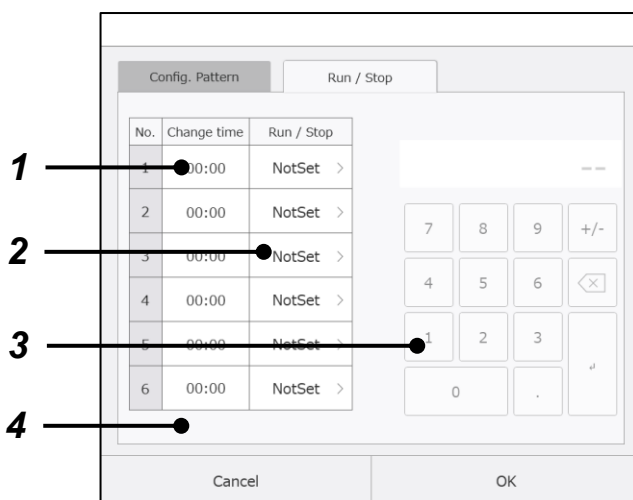
Panel for editing config. patterns and the run/stop events of all systems

Config. pattern change



| No | Item | Function |
|----|-------------------|--|
| 1 | Change time | Displays and lets you select a pattern change time. The background of the selected change time field is displayed in blue. |
| 2 | Pattern selection | Select the number of config. pattern to apply with touch operation. Select a pattern between 1 and 8 or OFF. |
| 3 | Change time input | Enter the value for the selected change time. A value between 00:00 and 23:59 can be set. |
| 4 | Note display | Displays notes. For details, see a separate table. |

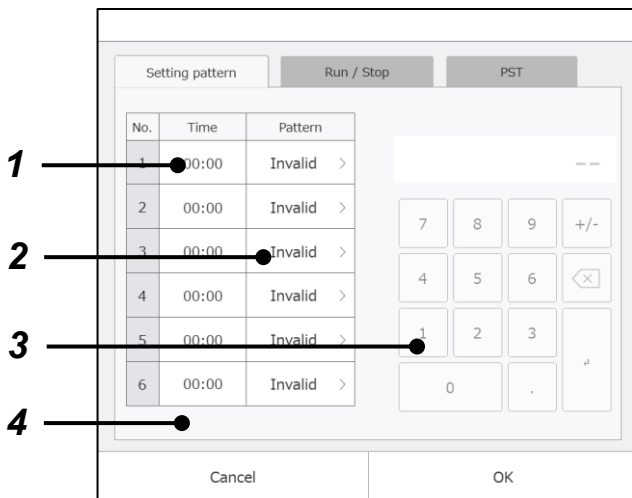
GC run/stop event change



| No | Item | Function |
|----|-------------------|--|
| 1 | Change time | Displays and lets you select an event application time. The background of the selected change time field is displayed in blue. |
| 2 | GC run/stop event | Select a GC run/stop event with touch operation. Select from OFF, Run, and Stop. |
| 3 | Change time input | Enter the value for the selected change time. A value between 00:00 and 23:59 can be set. |
| 4 | Note display | Displays notes. For details, see a separate table. |

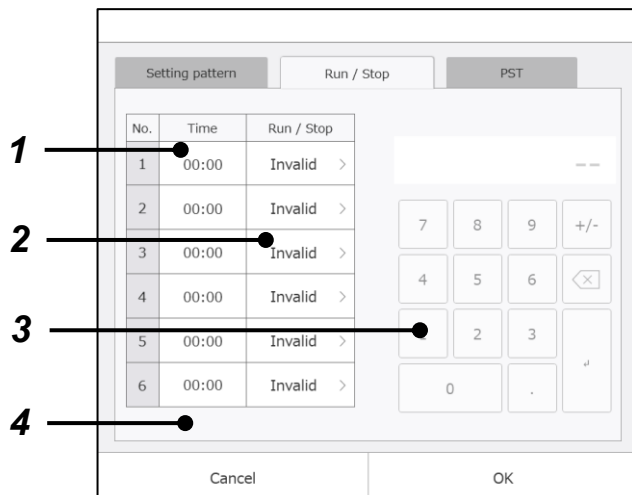
System schedule edit panel

Setting pattern change



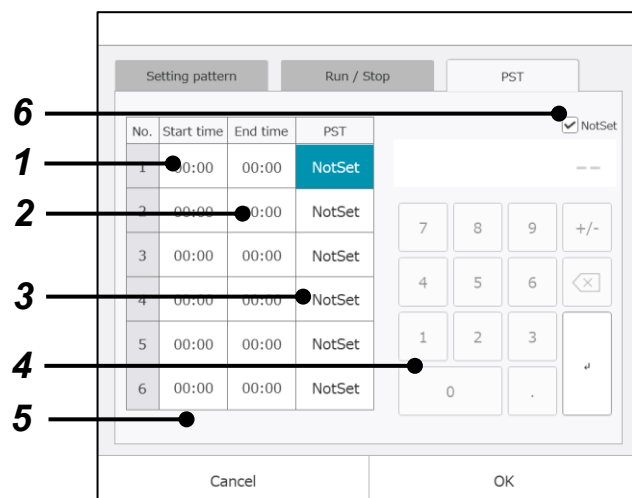
| No | Item | Function |
|----|-------------------|--|
| 1 | Time | Displays and lets you select a pattern change time. The background of the selected change time field is displayed in blue. |
| 2 | Pattern selection | Select the number of the setting pattern to apply. Select a pattern between 1 and 8 or OFF. |
| 3 | Change time input | Enter the value for the selected change time. A value between 00:00 and 23:59 can be set. |
| 4 | Note display | Displays notes. For details, see a separate table. |

System run/stop event change



| No | Item | Function |
|----|--------------------|--|
| 1 | Time | Displays and lets you select an event application time. The background of the selected change time field is displayed in blue. |
| 2 | Run/stop selection | For the run/stop event of the selected system, select from OFF, Run, and Stop. |
| 3 | Time input | Enter the value for the selected change time. A value between 00:00 and 23:59 can be set. |
| 4 | Note display | Displays notes. For details, see a separate table. |

System set temperature change



| No | Item | Function |
|----|--------------|--|
| 1 | Start time | Displays and lets you select the start and end times at which to apply the set temperature. The background of the selected change time field is displayed in blue. |
| 2 | End time | |
| 3 | PST | Enter the set temperature to apply. |
| 4 | Time input | Enter the values for the selected start and end times. A value between 00:00 and 23:59 can be set. |
| 5 | Note display | Displays notes. For details, see a separate table. |
| 6 | NotSet | To set the set temperature to NotSet, turn the check box ON. |

Note display

Shown if there are any faults in the set schedule.

| Display | Action or cause |
|---------|--|
| Note 1 | Check the times set in the list and their order. |
| Note 2 | The end time is earlier than the start time. Check them. |

Notes

Note 1: Of the 6 sets of data that can be set for one day, the set times must be registered in chronological orders.

The times must be registered in order of earliest to latest.

Note 2: Of the 6 sets of data that can be set for one day, it is not possible to skip any.

If Invalid is set for one set of data, only Invalid can be set for the subsequent sets of data.

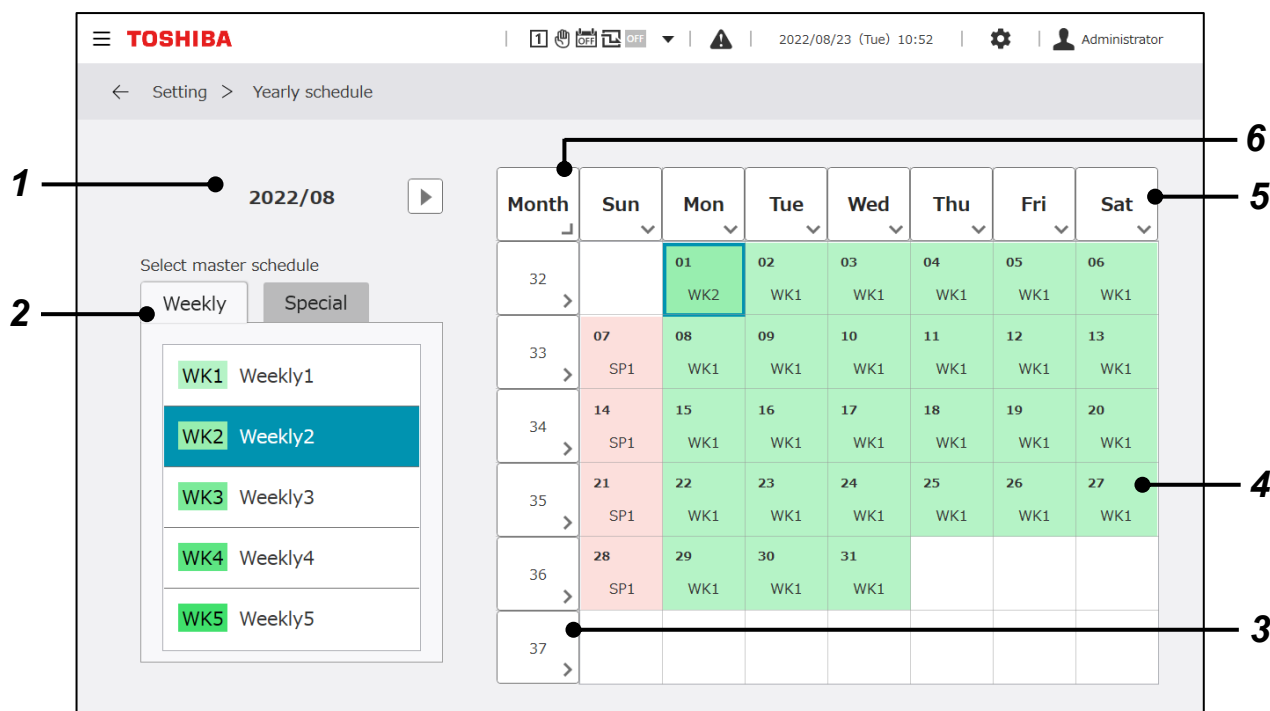
Note 3: The schedule setting items, run/stop event change and pattern change, operate only once at the set time.

Start and end times must be set only for the set temperature change setting. To make a setting continue for two consecutive days, set the setting end time for one day to 23:59 and set the setting start time for the next day to 00: 00 and set the same set temperature value.

Note4: Run/stop event and pattern change is pulse signal.

Yearly schedule

Allocate the weekly schedules/special schedules for 12 months, starting with the view month.



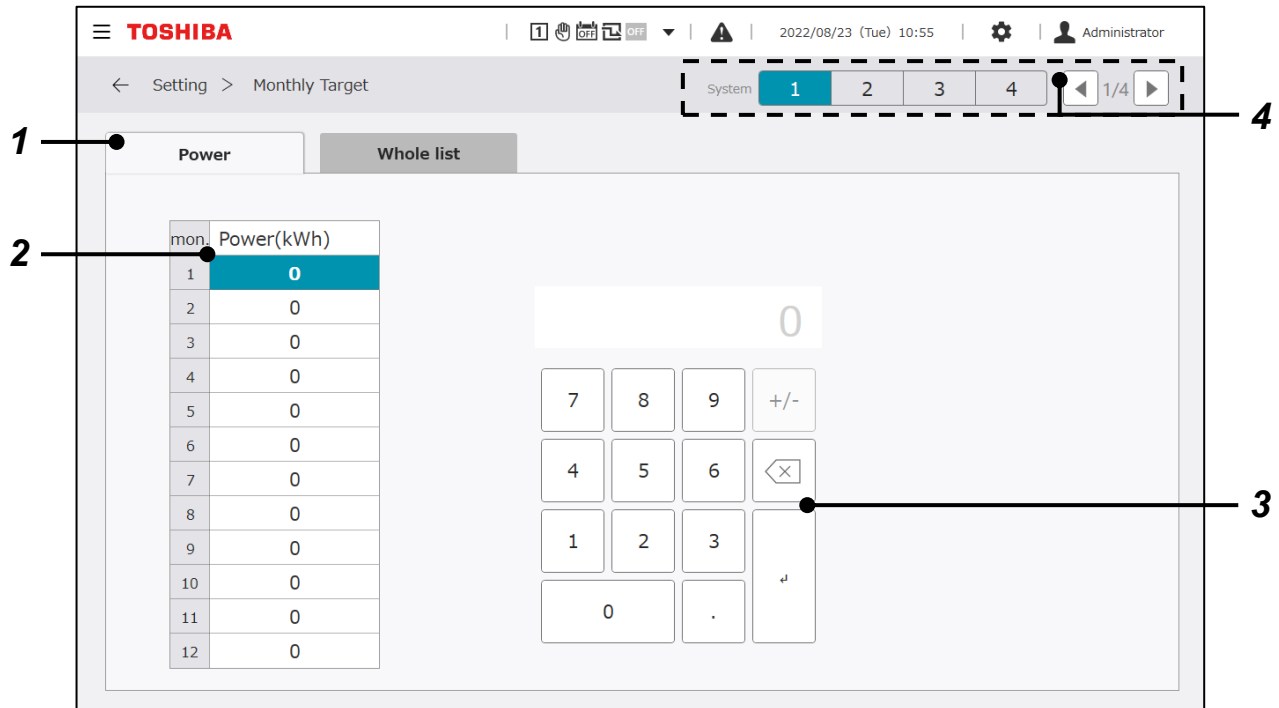
Display items

| No | Item | Function |
|----|--|---|
| 1 | Schedule setting month selection | Select the month for which to set a master schedule. Displays the calendar for the selected month. |
| 2 | Select master schedule | Switch between "Weekly" and "Special" tabs and select the master schedule to allocate (weekly schedule between 1 and 5 and special schedule between 1 and 5). The initial value is weekly schedule 1. |
| 3 | Button for applying schedule to a week at once | By operating a week button, the selected master schedule is reflected in the dates of the corresponding week in the displayed calendar. |
| 4 | Button for applying schedule to each day individually | By operating a date in the calendar, the selected master schedule is reflected individually. |
| 5 | Button for applying schedule to days of the week at once | By operating a day of the week button, the selected master schedule is reflected in the corresponding day of the week in the displayed calendar. |
| 6 | Button for applying schedule to a month at once | By operating the "Month" button, the selected master schedule is reflected in all days in the displayed calendar. |

10-4 Energy management settings

Control target setting

For each system and for each energy type, you can set a monthly energy consumption control target. The control targets set on this screen are displayed on the energy consumption graph.

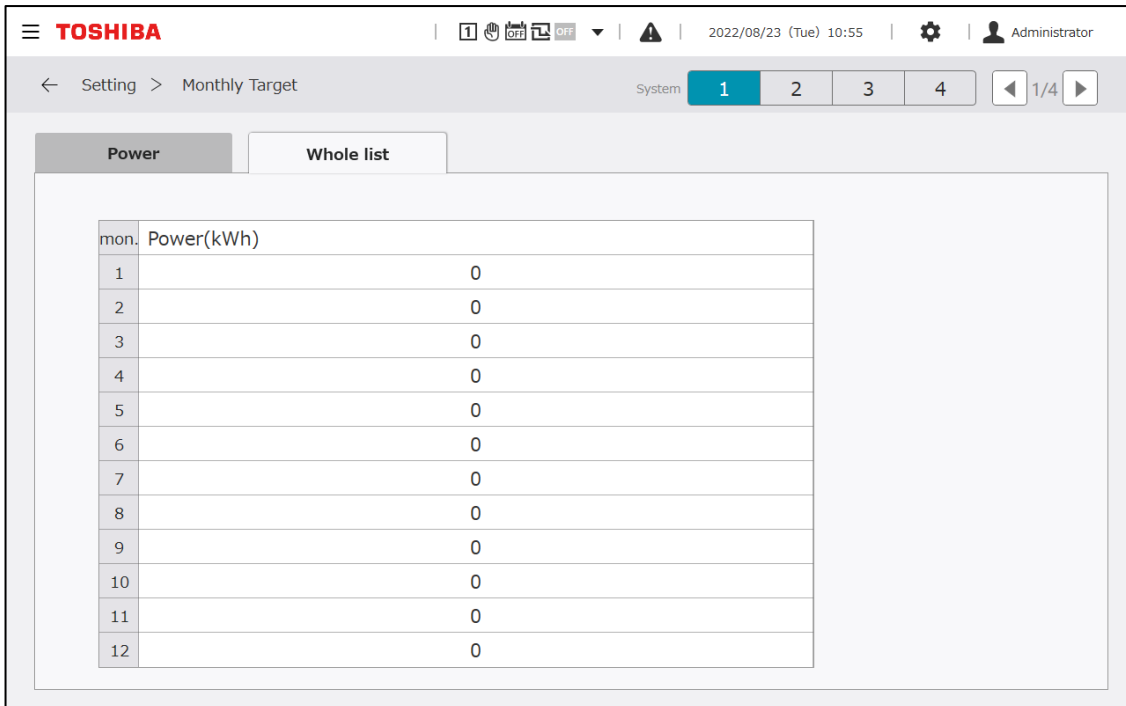


Display items

| No | Item | Function |
|----|------------------------------------|---|
| 1 | Selection of energy type to edit | Select the tab indicating the target energy type with touch operation. |
| 2 | Monthly target display (selection) | The currently set monthly values are displayed. Select the monthly value to edit with touch operation. |
| 3 | Setting value change | By using the setting value change panel, you can edit the selected setting value. |
| 4 | System switching buttons | Switch the system to display. |

Control targets - Whole list

You can check the monthly energy consumption control target for each system and for each energy type.



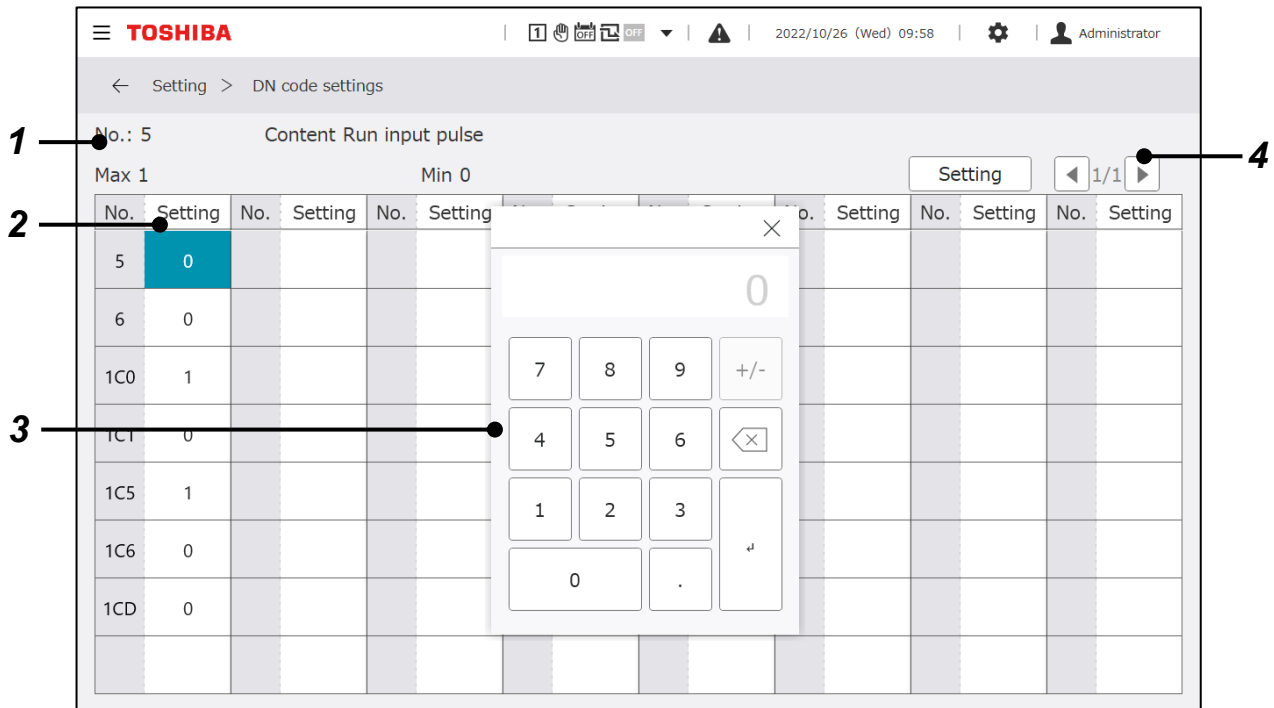
The screenshot displays the Toshiba control interface. At the top, the Toshiba logo is visible on the left, and the date and time (2022/08/23 (Tue) 10:55) are shown on the right. Below the header, there is a navigation bar with a back arrow, the text 'Setting > Monthly Target', and a 'System' selector with buttons for 1, 2, 3, and 4. System 1 is currently selected. To the right of the system selector, there are navigation arrows and a '1/4' indicator. Below the navigation bar, there are two tabs: 'Power' (selected) and 'Whole list'. The main content area contains a table with the following data:

| mon. | Power(kWh) |
|------|------------|
| 1 | 0 |
| 2 | 0 |
| 3 | 0 |
| 4 | 0 |
| 5 | 0 |
| 6 | 0 |
| 7 | 0 |
| 8 | 0 |
| 9 | 0 |
| 10 | 0 |
| 11 | 0 |
| 12 | 0 |

10-5 Other setting

DN code settings

You can edit each of the setting values related to GC operation.



Display items

| No | Item | Function |
|----|--|---|
| 1 | Selected item name | Displays information about the selected DN code item. (DN code No., item name, maximum, minimum, and restart ↻) |
| 2 | Selection of target whose settings are to change | Select the item whose settings are to change by operating it. The background of the selected item is displayed in blue. |
| 3 | Setting dialogue box | Select the item whose settings are to change and operate the "Setting" button to display the setting dialogue box. For information about the operation method, check the section explaining the value input panel. |
| 4 | Page feed | Indicates (present display screen number/total number of display screens). Switch between display screens with touch operation. |

DN codes that can be set

| Code No. | Item name | Description of setting | Initial value | Maximum | Minimum | Restart |
|----------|---------------------------------|--|---------------|---------|---------|---------------|
| 5 | Run signal make/pulse switching | You can change the run signal between make signal and pulse signal. 0: Make / 1: Pulse | 0 | 1 | 0 | Not necessary |
| 6 | Reset failure outage | With the initial setting, switching one of GC, MC, and UC to "Unit" causes the failure to be reset. By setting reset failure outage to 1 (ON), you can reset the failure by performing stop operation. 0: OFF / 1: ON | 0 | 1 | 0 | Necessary |
| 1C0 | Modbus port address | See the Modbus Specifications. | — | — | — | — |

| Code No. | Item name | Description of setting | Initial value | Maximum | Minimum | Restart |
|----------|--|--|---------------|---------|---------|-----------|
| 1C1 | Service port address | If multiple group controllers are monitored with remote monitoring, for example, you can obtain data for each by changing the address. | 0 | 255 | 0 | Necessary |
| 1C5 | Modbus address correction | See the Modbus Specifications. | — | — | — | — |
| 1C6 | Modbus directive start-stop/config. pattern/demand | See the Modbus Specifications. | — | — | — | — |
| 1CD | Close Application | You can close the application. 1:End | 0 | 1 | 0 | Necessary |

I/O settings

Allocate the functions for run/stop signals and other external input/output signals to the I/O board.

Setting values can be changed from the screen below. Changing setting values is performed by a service person. Contact us.

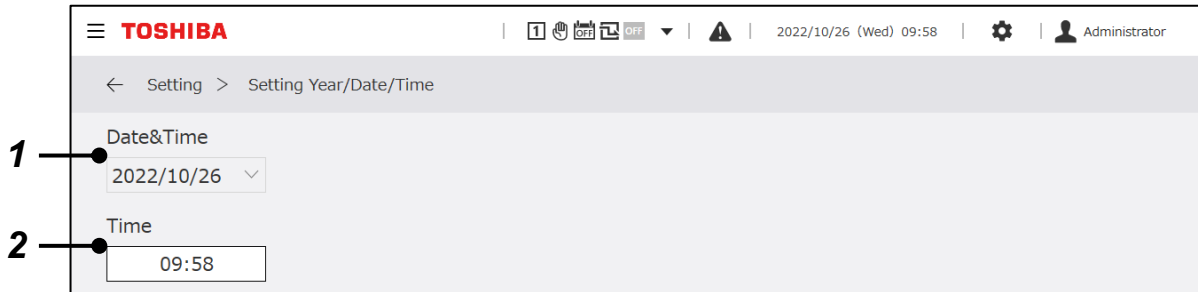
The screenshot shows the Toshiba I/O settings web interface. The page title is 'Setting > I/O settings'. The user is logged in as 'Administrator' on 2022/10/26 (Wed) 09:58. The 'IO Bord No.' is set to 1. The 'Analog Input' tab is selected, showing a table with 8 rows. Each row has a 'No.' column and a 'Function' column. All 'Function' values are 'NotSet'.

| No. | Function |
|---------------|----------|
| Analog Input1 | NotSet |
| Analog Input2 | NotSet |
| Analog Input3 | NotSet |
| Analog Input4 | NotSet |
| Analog Input5 | NotSet |
| Analog Input6 | NotSet |
| Analog Input7 | NotSet |
| Analog Input8 | NotSet |

Time settings

Set the present time (year/month/day/hours/minutes) to apply to the GC.

The time set on this screen is used for screen display, data saving, and the time synchronisation with connected devices. Be sure to set it at first startup.

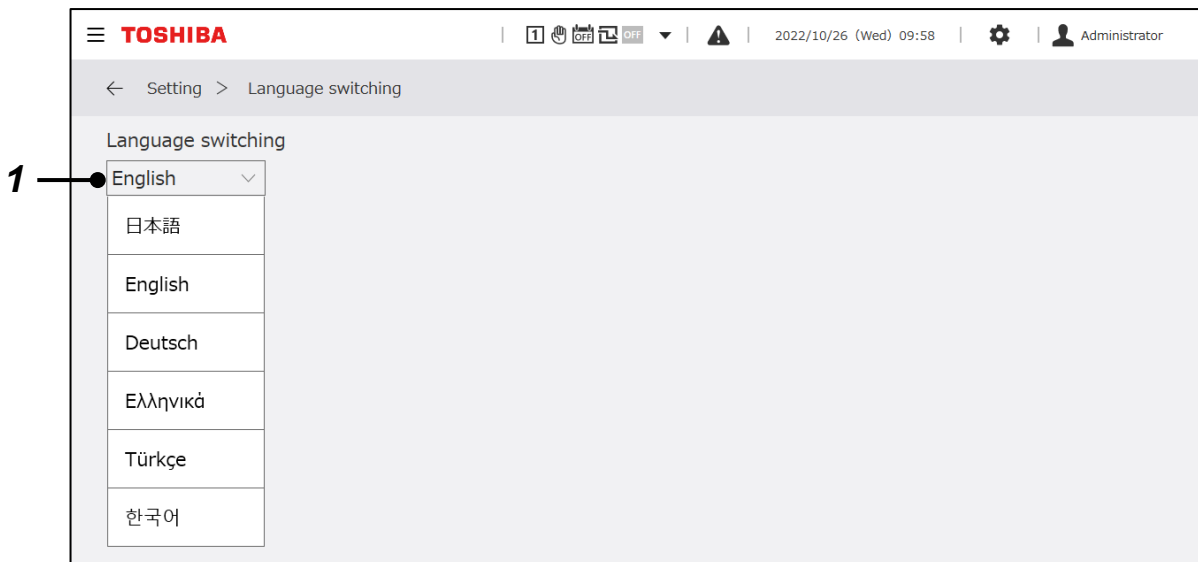


Display items

| No | Item | Function |
|----|--------------------------|--|
| 1 | Year/month/day selection | Display the calendar panel with touch operation and select a date. |
| 2 | Time selection | Display the input panel with touch operation and enter a time. |

Language switching

Switch to the language used. After switching, the display software, including the PC monitor app, will restart.



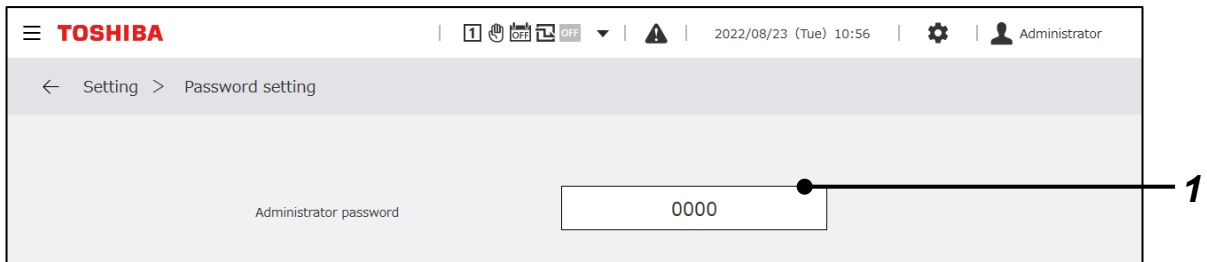
Display item

| No | Item | Function |
|----|--------------------|--|
| 1 | Language switching | Select the language used for screen display. |

10-6 Maintenance

Password input

Set an administrator password.



Display item

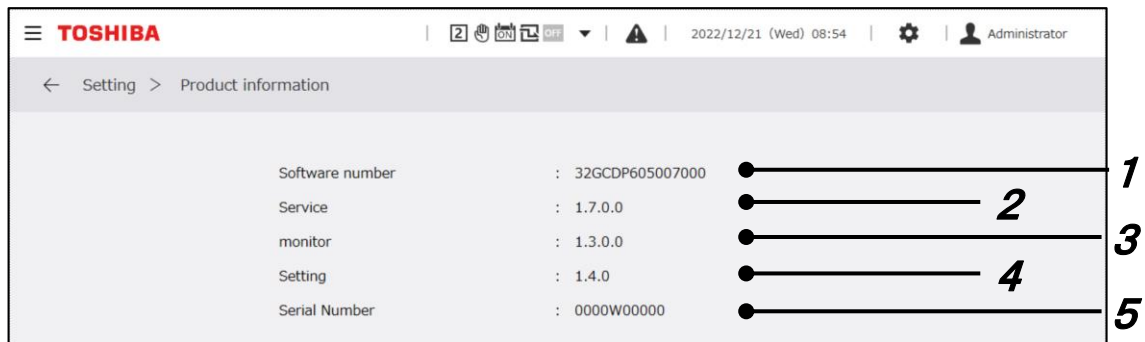
| No | Item | Function |
|----|--------------------------------|---|
| 1 | Administrator password setting | Set an administrator password. Display the input panel with touch operation. |

Notes

Note 1: The initial value for the administrator password is "0000". Change it, if necessary.

Product information

You can display the GC software version and the product number.

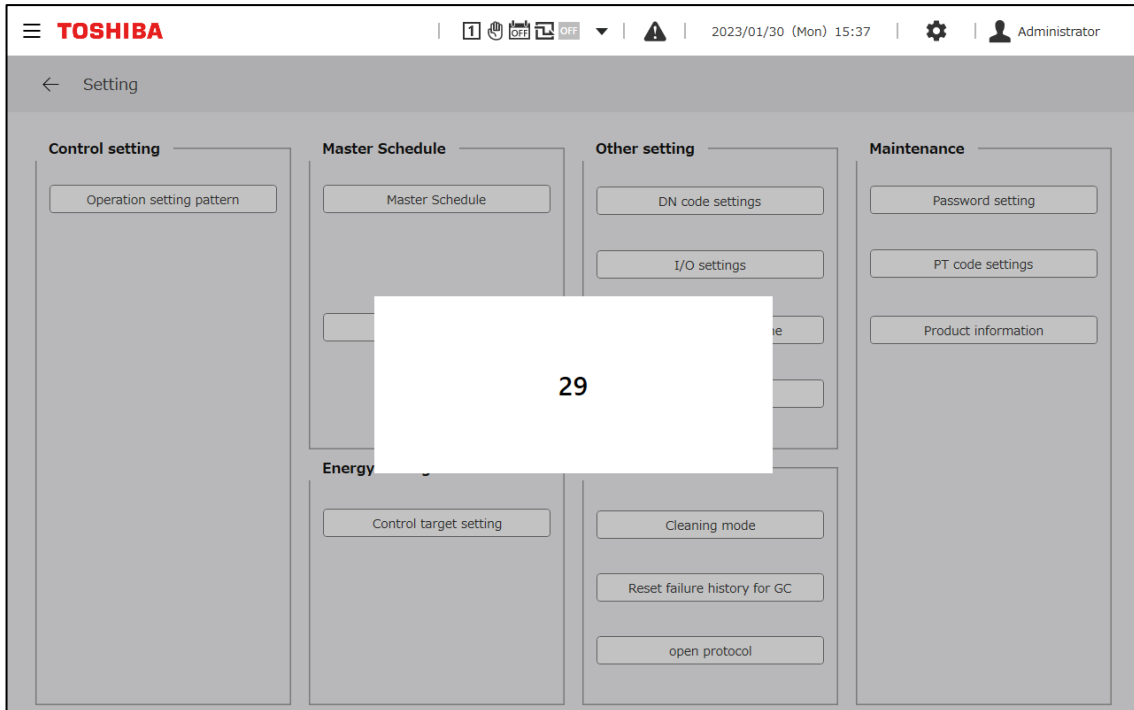


Display item

| No | Item | Function |
|----|-----------------|--|
| 1 | Software number | Displays the version number of the software installed in the GC. |
| 2 | Service | Displays the version number of the control app. |
| 3 | Monitor | Displays the version number of the monitor app. |
| 4 | Setting | Displays the version number of Setting data. |
| 5 | Serial Number | Displays the serial number of the GC main unit. |

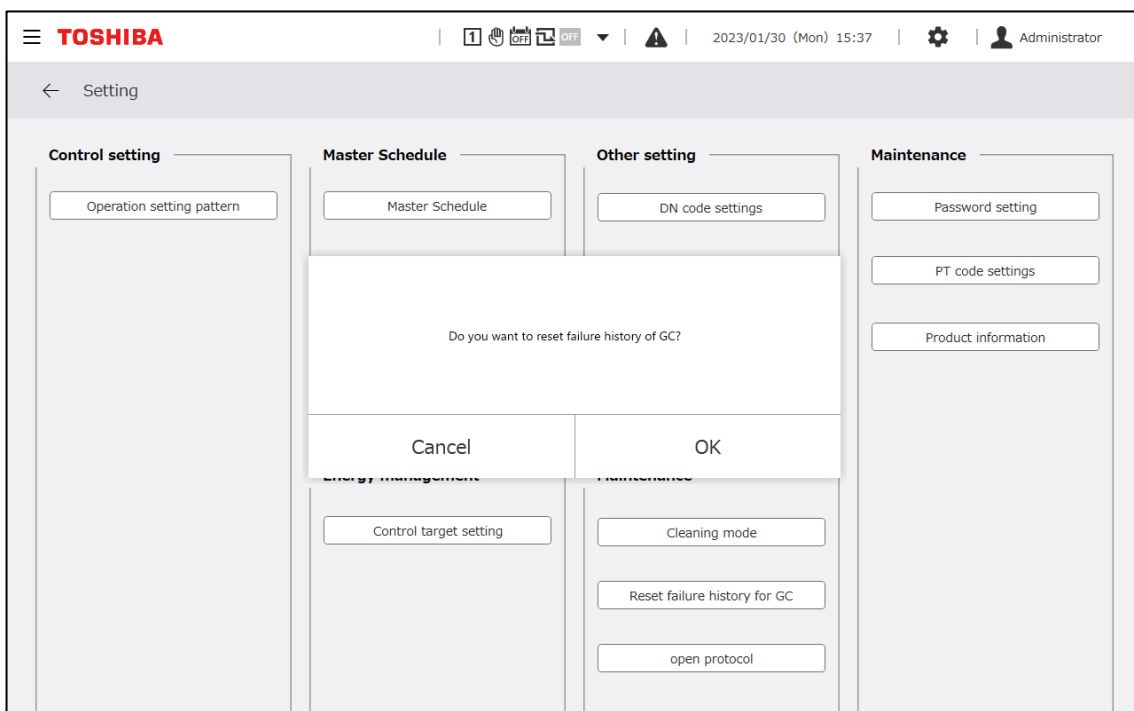
Cleaning mode

This is a function to lock the operation of the touch panel when the display screen is to be cleaned. In 30 seconds after this menu is operated, the touch panel will return to normal, so that touch panel operation can be performed.



Reset failure history for GC

You can reset GC failure history. On the panel displayed by operating this menu, select the “OK” button to execute a reset. On this panel, you cannot perform a failure reset of MCs and UCs. Perform a reset on each MC.




Open Protocol

Set the IP address of Modbus TCP, BACnet and PC monitor. Contact us for more information.

The screenshot shows a web interface for configuring network protocols. At the top, there is a navigation bar with the Toshiba logo, a menu icon, and a breadcrumb trail: "Setting > open protocol". The interface has three tabs: "Modbus TCP", "BACnet", and "PCMonitor". The "BACnet" tab is currently selected. Below the tabs, there are three input fields:

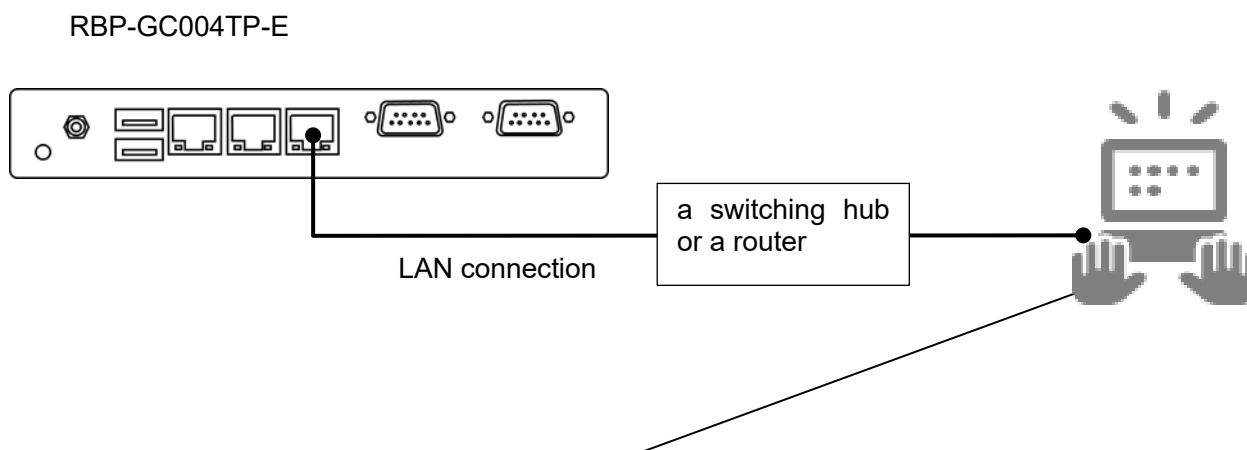
- IP Address:** A row of four input boxes containing the values 192, 168, 0, and 122, separated by dots.
- Subnet Mask:** A row of four input boxes containing the values 255, 255, 255, and 0, separated by dots.
- Port No:** A single input box containing the value 502.

11 PC Monitor App

| | |
|---|---|
|  Prohibited | <p>The group controller cannot be connected to the Internet.</p> <p>Never connect it to the Internet. We shall assume no liability for any problems caused by connecting it to the Internet. It can be connected only to a local area network.</p> |
|---|---|

11-1 Overview

By installing the PC monitor app in a PC connected to the group controller (GC) via a network, you can display the GC operation screen on the PC screen to obtain, display, and update data in real-time.



On the PC in which the PC monitor app is installed, GC information is displayed in real-time.

Figure Illustration of the group controller connected to a PC in which the PC monitor app is installed

Notes

- Note 1: To use the functions of the PC monitor app, settings must be made on the GC side by a Toshiba Carrier service person.
- Note 2: To use the PC monitor app, a LAN cable is required to connect the GC to the PC used.
- Note 3: Depending on the models of devices connected to the GC, restrictions may be imposed on the functions that can be operated and the items that can be displayed.
- Note 4: For the display time of the PC monitor app, the set time received from the GC side is used. Set the time on the GC side beforehand.
- Note 5: Depending on the OS and environment of the PC used, the design display may differ slightly.
- Note 6: If the same operation is performed from the touch panel and the PC monitor app, the operation performed last will be given priority.
- Note 7: We shall not guarantee the operation of the PC monitor app if it is connected to multiple units.

11-2 Installation conditions

To start up the PC monitor app, Microsoft .NET Framework must be installed in the PC used beforehand. For the PC monitor app to operate appropriately, the operating environment for the PC used must meet the conditions below.

<Verified operating system versions>

- Microsoft Windows 10 (64 bit)
- Windows 10 ver.1803

<Microsoft .NET Framework version>

- .NET Framework 4.7.2 or later

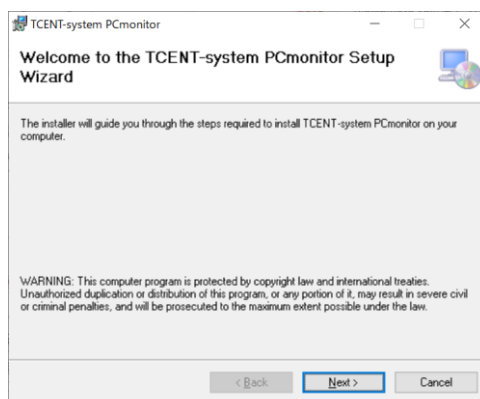
Note: To perform the following installation operation, first log in to the PC used with the administrator privilege.

11-3 Installation method

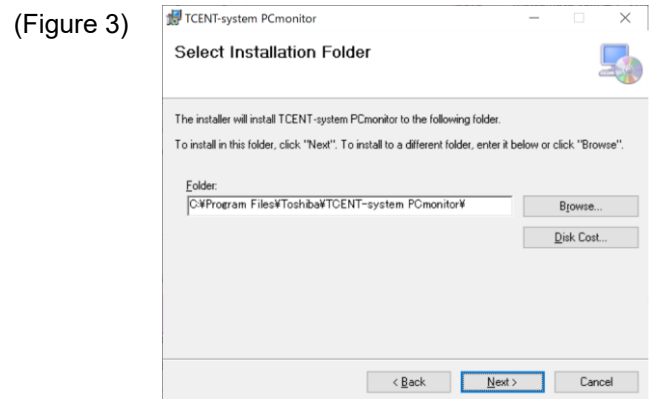
The following explains the procedure for installing the app in Windows 10 (64 bit).

- 1 Copy the "setup.PCMonitor" folder to the desktop of the PC used.
- 2 Double-click setup_Monitor_PC.exe.
- 3 Select the language used for installation and click "OK". (Figure 1)
- 4 If the conditions are not met, you will be taken to the screen for installing the necessary software. Click "Install".
- 5 When the restart confirmation dialogue box appears, click "Yes".
- 6 After the PC restarts, you will be automatically taken to the installation preparation dialogue box.
- 7 Click "Next". (Figure 1)

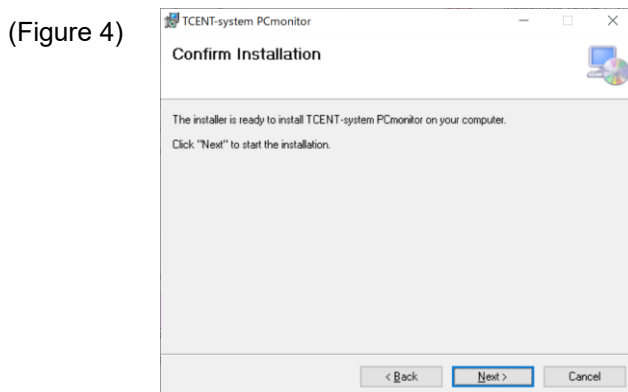
(Figure 1)



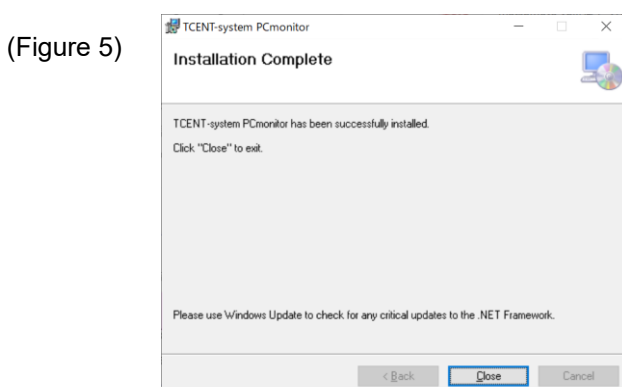
- 8** Select “I Agree” and then click “Next”. (Figure 2)
- 9** Select the application save folder and the user and click “Next”. (Figure 3)
- * The initial save folder is “C:\Program Files\Toshiba\TCENT-system PCmonitor\”.



- 10** Click “Next” to start installation. (Figure 4)
- 11** If the user account control message dialogue box is displayed, select “Yes”.



- 12** You will be taken to the installation in progress display.
- 13** When the installation completion dialogue box is displayed, click “Close”. (Figure 5)



14 On the desktop, the shortcut icon “Group Controller Series4 PCmonitor” is created. (Figure 6)

(Figure 6)



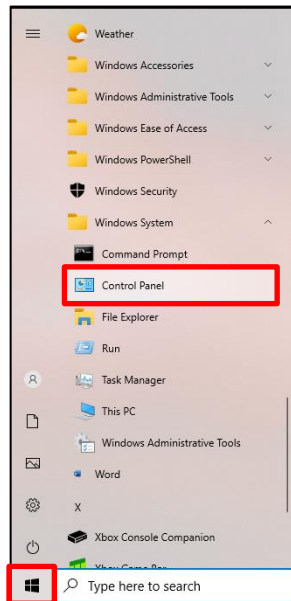
11-4 Uninstallation method

This section explains the procedure for uninstalling the PC monitor app.

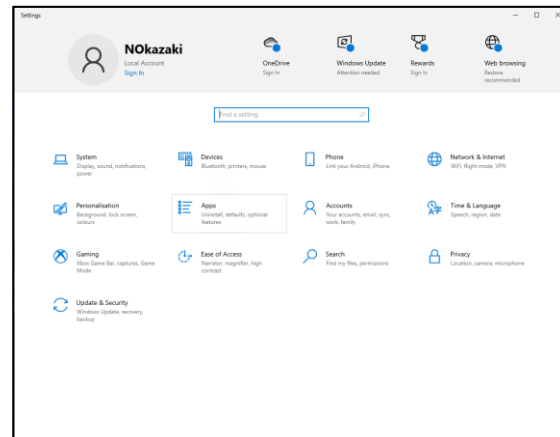
The following explains the procedure for uninstalling the app in Windows 10 (64 bit).

- 1 Log in to the PC used with an account that has the administrator privilege.
- 2 Select the [Start] button→[Windows System]→[Control Panel]. (Figure 1)
- 3 After the Control Panel is displayed, set the display method to [Category] and select [Apps]. (Figure 2)

(Figure 1)



(Figure 2)

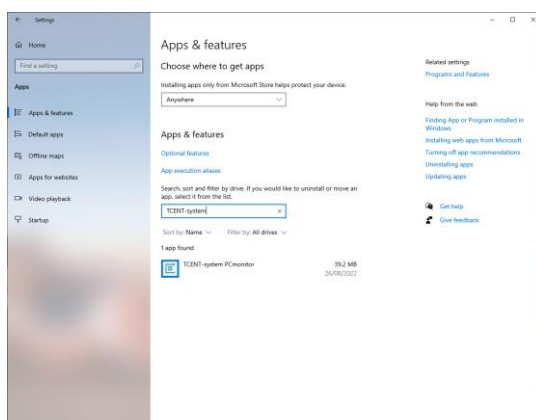


- 4 From the list displayed, search for "TCENT-system PCmonitor", right-click it, and select "Uninstall". (Figure 3)

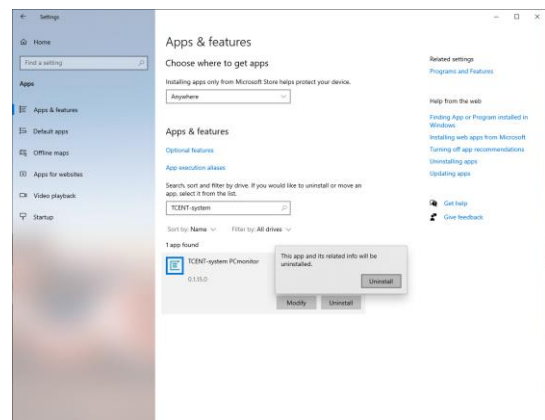
The "This app and its related info will be uninstalled." dialogue box is displayed. Select "Uninstall". (Figure 4)

- 5 If the user account control dialogue box is displayed, select "Yes".

(Figure 3)



(Figure 4)



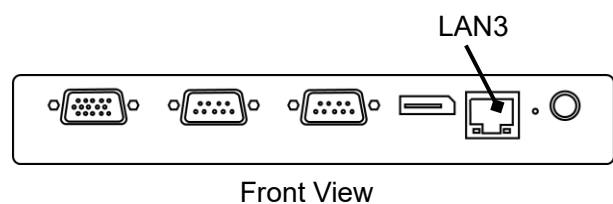
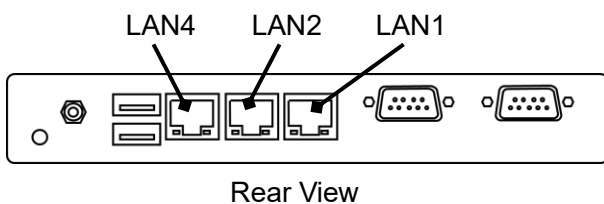
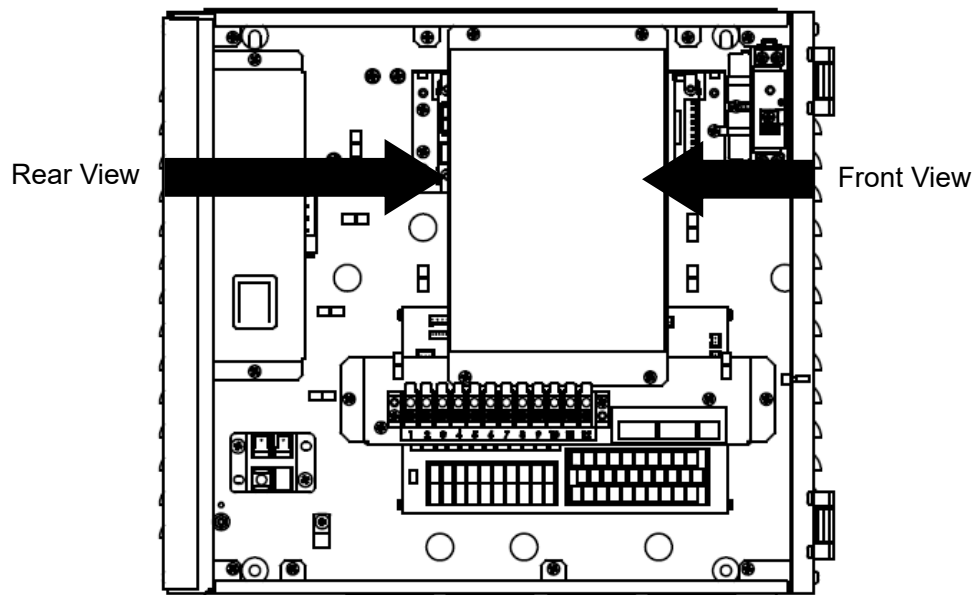
- 6 Check the list of programs to uninstall. If you cannot find "TCENT-system PCmonitor", uninstallation is completed.

11-5 Connecting to the group controller

Network connection guide

The following explains the procedure for connecting the group controller (referred to as the GC in the remainder of this manual) to the PC in which the PC monitor app is installed.

- 1 To connect to the PC monitor app, use LAN1. Make a LAN connection via a switching hub or a router.



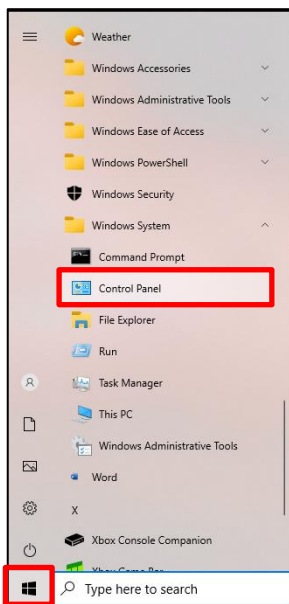
Setting the PC for the PC monitor app

Setting an IP address

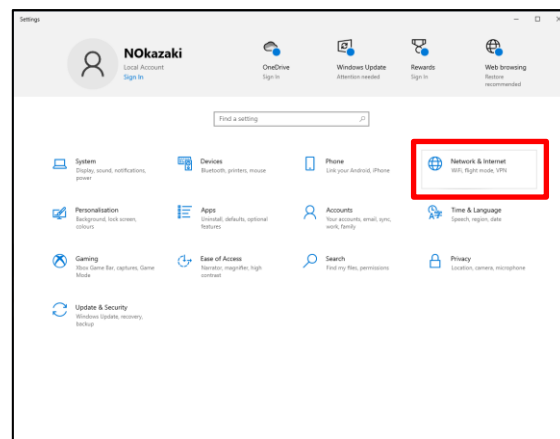
<Windows 10>

- 1 Log in to the PC used with an account that has the administrator privilege.
- 2 Select the [Start] button→[Windows System]→[Control Panel]. (Figure 1)
- 3 After the Control Panel is displayed, select [Network & Internet]. (Figure 2)

(Figure 1)

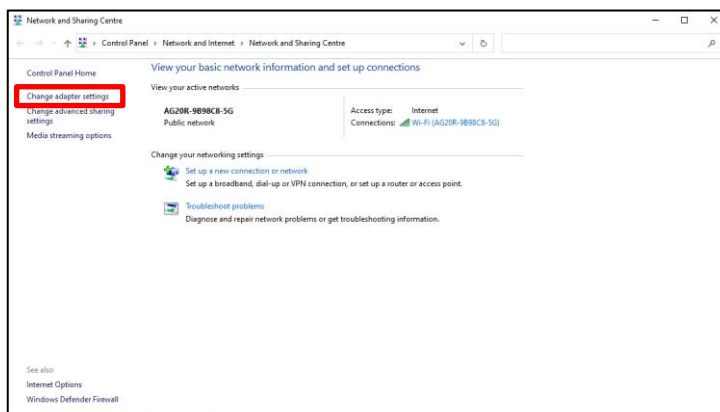


(Figure 2)



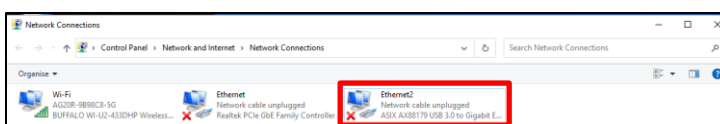
- 4 Select [Change adapter settings]. (Figure 3)

(Figure 3)



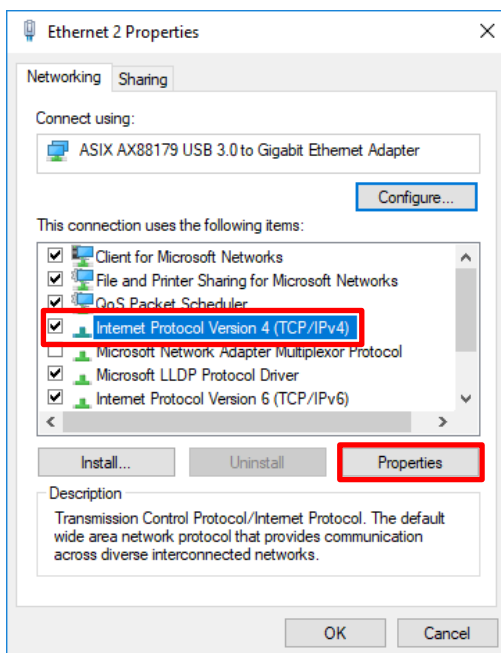
- 5 Right-click the relevant network and select [Properties]. (Figure 4)

(Figure 4)

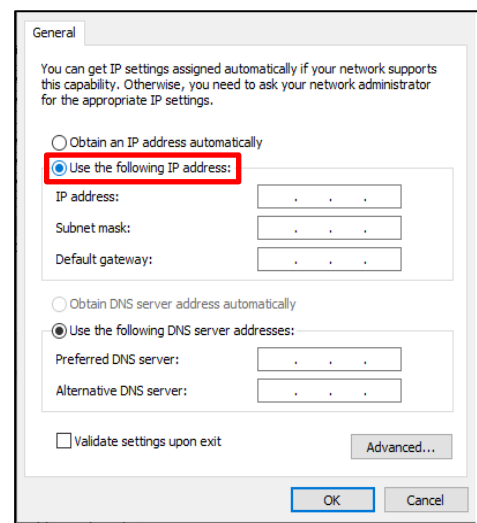


- 6 Place a check in the check box next to [Internet protocol version 4 (TCP/IPv4)] to select [Internet protocol version 4 (TCP/IPv4)] and click [Properties]. (Figure 5)
- 7 Select "Use the following IP address" and change the settings of the IP address and the subnet mask according to the setting values on the GC side. (If the GC setting values are initial values: Set the IP address on the PC monitor app side to 192.168.1.*** (where *** is other than 40) and the subnet mask to 255.255.255.0. If the setting values on the GC side are changed, change the settings on the PC monitor app side according to the setting values on the GC side. Refer to "Open protocol" for how to change the GC side IP address.) After changing the setting values, click the [OK] button. (Figure 6)

(Figure 5)



(Figure 6)



- 8 Close all screens.

11-6 Starting and exiting the application

Starting the application

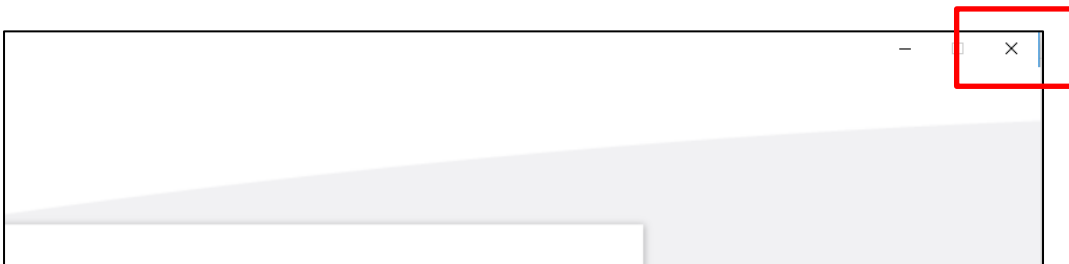
- 1 Double-click the "Group Controller Series4 PCMonitor" shortcut icon, which is created on the desktop after the application is installed.



- 2 The login screen is displayed.
For details, see "5-3 Login operation".

Exiting the application

During the execution of the application, click the "x" button at the top right corner of the screen to hide the application screen and exit the application.



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| | |
|------------------------------|-----------|
| Software module | |
| Newtonsoft.Json | Exhibit A |
| Nlog | Exhibit B |
| Microsoft.Xaml.Behaviors.Wpf | Exhibit C |

Exhibit A

Newtonsoft.Json

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Exhibit B

Nlog

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Toshiba Carrier Corporation

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Date: 202303