



YHAU-C Single Effect Steam Fired Absorption Chiller Mod A

200 to 1000 ton, 703 to 3517 kW



Parts Manual

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New Release



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General safety guidelines

► **Important:** Read before proceeding.

This equipment is a relatively complicated apparatus. During rigging, installation, operation, maintenance, or service, individuals may be exposed to certain components or conditions including, but not limited to: heavy objects, refrigerants, materials under pressure, rotating components, and both high and low voltage. Each of these items has the potential, if misused or handled incorrectly, to cause bodily injury or death. It is the obligation and responsibility of rigging, installation, and operating or service personnel to identify and recognize these inherent hazards, protect themselves, and proceed safely in completing their tasks. Failure to comply with any of these requirements could result in serious damage to the equipment and the property in which it is situated, as well as severe personal injury or death to themselves and people at the site.

This document is intended for use by owner-authorized rigging, installation, and operating or service personnel. It is expected that these individuals possess independent training that will enable them to perform their assigned tasks correctly and safely. It is essential that, before performing any task on this equipment, this individual shall have read and understood the on-product labels, this document and any referenced materials. This individual shall also be familiar with and comply with all applicable industry and governmental standards and regulations pertaining to the task in question.

Safety symbols

The following symbols are used in this document to alert the reader to specific situations:



Indicates a possible hazardous situation which will result in death or serious injury if correct care is not taken.



Indicates a potentially hazardous situation which will result in possible injuries or damage to equipment if correct care is not taken.



Identifies a hazard which could lead to damage to the machine, damage to other equipment, or environmental pollution if correct care is not taken or instructions are not followed.

① **Note:** Highlights additional information useful to the technician in completing the work being performed correctly.

WARNING

External wiring, unless specified as an optional connection in the manufacturer's product line, is not to be connected inside the control cabinet. Devices such as relays, switches, transducers and controls and any external wiring must not be installed inside the micro panel. All wiring must be in accordance with the Johnson Controls published specifications and must be performed only by a qualified electrician. Johnson Controls will not be responsible for damage/problems resulting from improper connections to the controls or application of improper control signals. Failure to follow this warning will void the manufacturer's warranty and cause serious damage to property or personal injury.

Changeability of this document

In complying with the Johnson Controls policy for continuous product improvement, the information contained in this document is subject to change without notice. Johnson Controls makes no commitment to update or provide current information automatically to the manual or product owner. Updated manuals, if applicable, can be obtained by contacting the nearest Johnson Controls Service office or accessing the Johnson Controls Knowledge Exchange website at <https://docs.johnsoncontrols.com/chillers/>.

The rigging, lifting, and operating or service personnel are responsible for verifying the applicability of these documents to the equipment. If there is any question regarding the applicability of these documents, rigging, lifting, and operating or service personnel should verify whether the equipment has been modified and if current literature is available from the owner of the equipment before performing any work on the chiller.

Using the Parts Manual

Johnson Controls offers an assortment of replacement parts for Johnson Controls, YORK, and DS units. Each replacement part is manufactured and fitted for a specific model. This Parts Manual is for standard Johnson Controls units. Chiller units built with special options, modifications, or conversions are not covered in this manual.

This Parts Manual specifies Johnson Controls chiller replacement parts using part numbers, descriptions, quantities, and drawing figures. To determine the correct replacement part, locate the item on the drawing figure and refer to the parts list for the part number, description, and quantity.

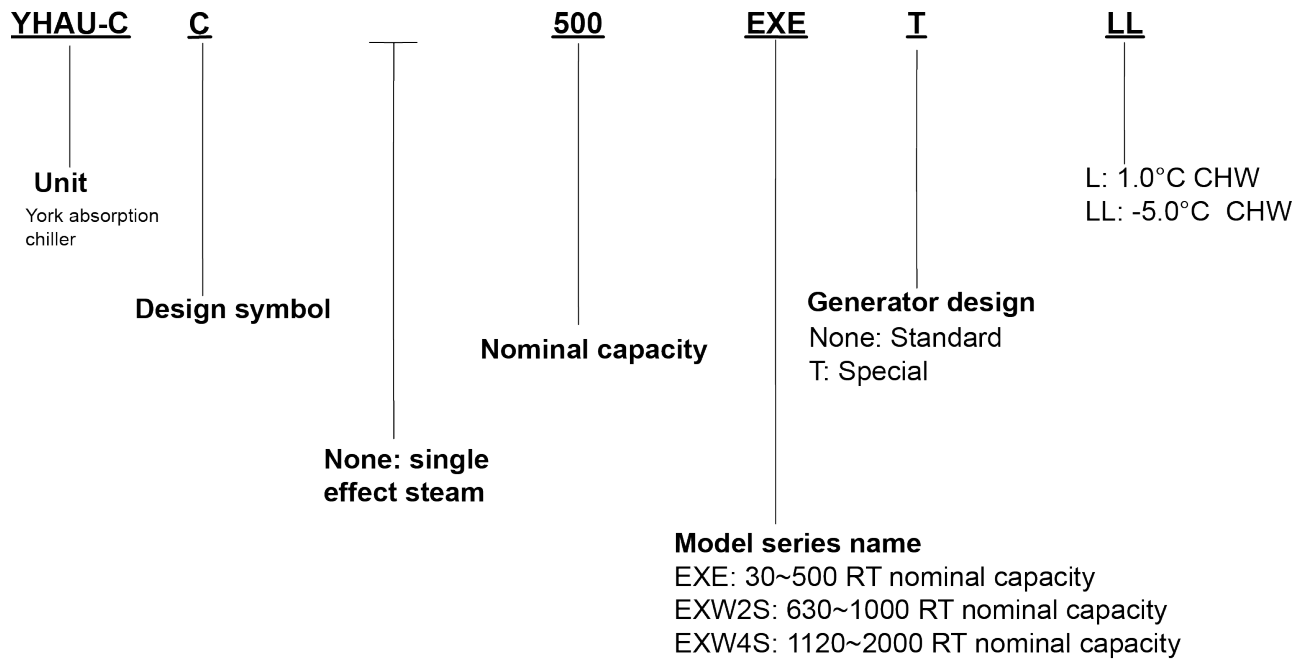
- ① **Note:** When requesting a quotation or placing an order, provide a unit model number, unit serial number and part number. The model and serial numbers for the unit are located on the nameplate on the side of the control panel. Failure to provide this information may delay processing of your request.

Table 1: Contact details for replacement parts

Region	Contact details
North America	Chiller Parts Center Baltimore Telephone: +1 800 932 1701 Email: chillerparts@jci.com
	Chiller Parts Center Houston Telephone: +1 833 278 7991 Email: chillerpartsHouston@jci.com
	Chiller Parts Center NOLA Telephone: +1 833 283 3738 Email: chillerpartsNOLA@jci.com
	Chiller Parts Center Toronto Telephone: +1 905 488 3642 or +1 905 488 3641 Email: chillerpartstoronto@jci.com
	Equipment Owners within USA who maintain their own equipment Telephone: +1 800 482 2778 Email: cg-baltimore-parts-customer@jci.com
Europe	For parts availability and ordering YORK HVAC Parts, use the following link: solutionnavigator.com
APAC	Applied APAC Parts Center Website: https://jcibeasia.my.salesforce.com/
Global PTS	Address: 5000 Renaissance Drive New Freedom, PA, USA 17349 Telephone: 1-717-771-6161 Email: bechillerspt-absorber@jci.com

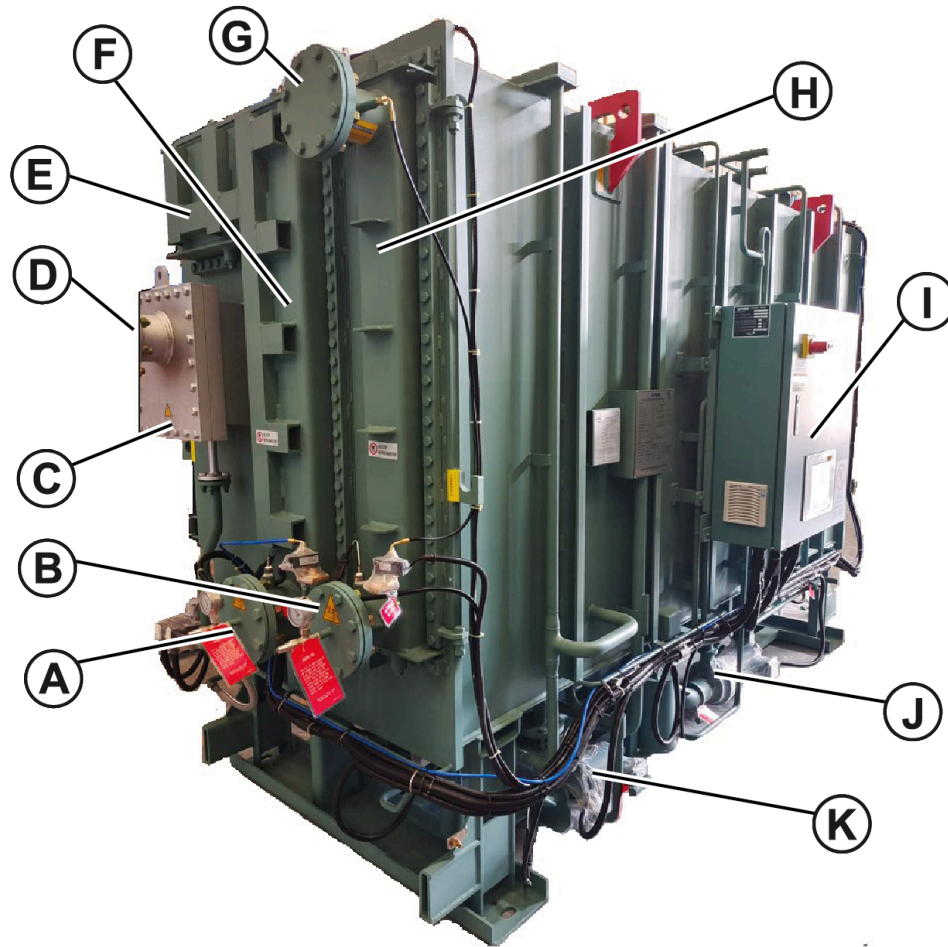
Note: This manual does not include part numbers for tubes. If you need tubes or any other parts that are not in this manual, the global or local product technical support (PTS) department can provide the part number.

Nomenclature



YHAU-C components overview

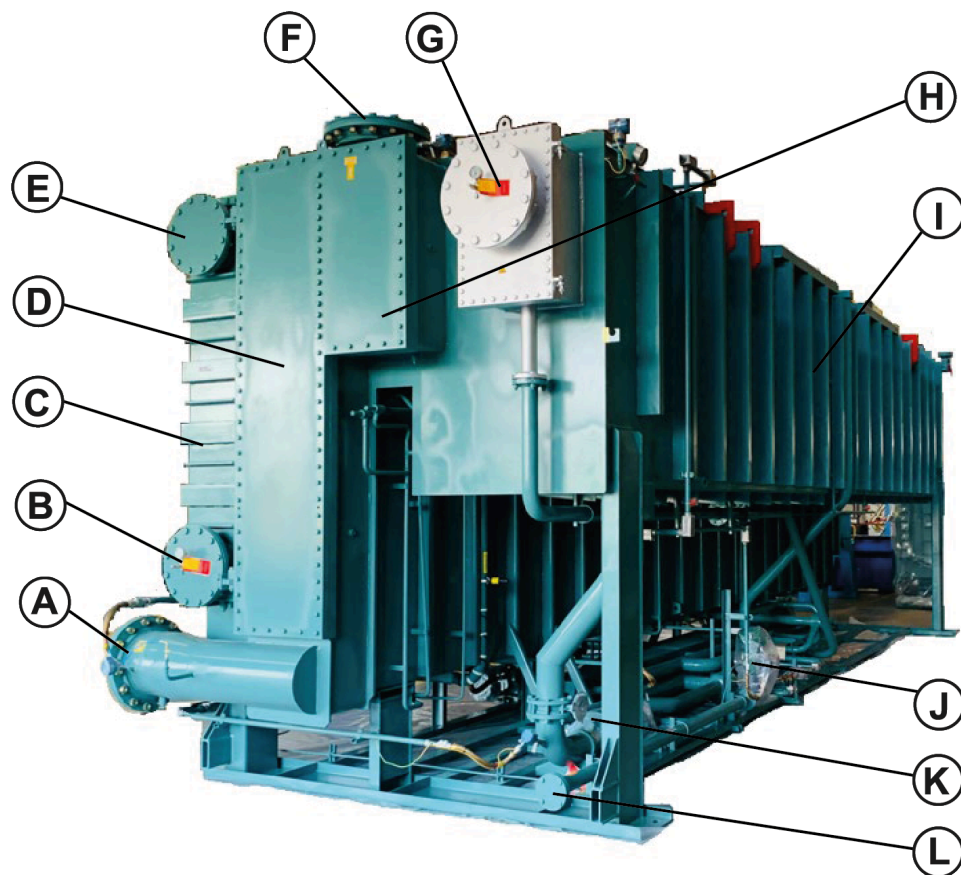
Figure 1: EXE series overview



LD32974

Callout	Component
A	Cooling water inlet
B	Chilled water inlet
C	Generator
D	Steam inlet
E	Condenser
F	Absorber
G	Chilled water outlet
H	Evaporator
I	Control panel
J	Solution circulation pump
K	Refrigerant pump

Figure 2: EXW series overview

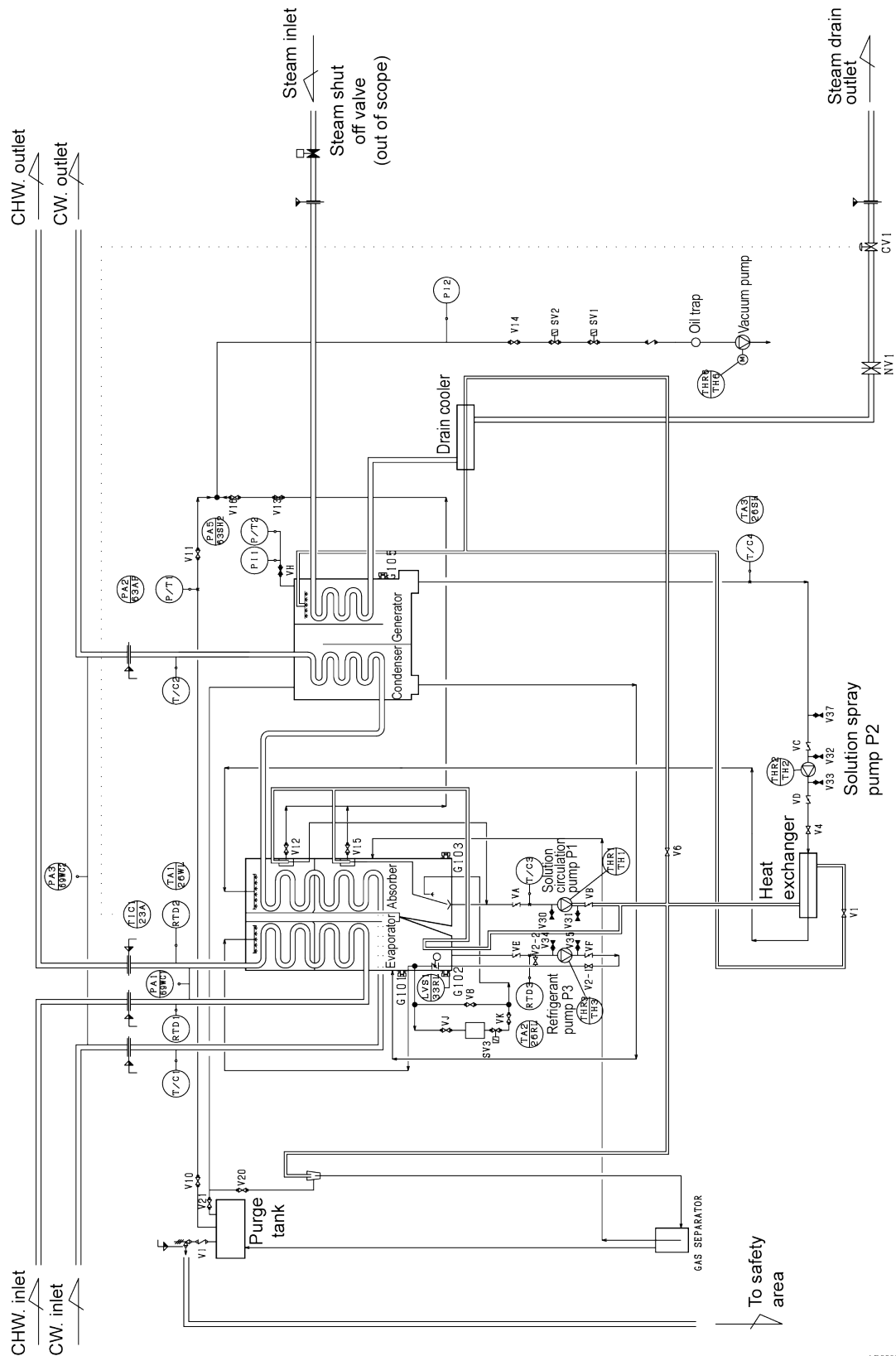


LD32975

Callout	Component
A	Cooling water inlet
B	Chilled water inlet
C	Evaporator
D	Absorber
E	Chilled water outlet
F	Cooling water outlet
G	Steam inlet
H	Condenser
I	Generator
J	Steam drain control valve
K	Solution spray pump
L	Steam drain outlet

Process and instrumentation diagram

Figure 3: Process and instrumentation diagram



LD22904

Note: The process and instrumentation diagram is for reference only.

Note:

*1: Option for isolation valve for solution and refrigerant pump

*4: Option for air vent and drain valve

*7: Only for EXL-B model

Symbol	Name	Use
VA	Shut off valve	Shut off valve for solution pump
VB	Shut off valve	Shut off valve for solution pump
VC	Shut off valve	Shut off valve for solution spray pump
VD	Shut off valve	Shut off valve for solution spray pump
VE	Shut off valve	Shut off valve for refrigerant pump
VF	Shut off valve	Shut off valve for refrigerant pump
VH	Shut off valve	Shut off valve for generator press. gauge
VI	Shut off valve	Shut off valve for press. release valve
VJ	Shut off valve	Shut off valve for ref. blow solenoid valve
VK	Shut off valve	Shut off valve for ref. blow solenoid valve
V1	Flow adjusting valve	For generator solution flow adjusting
V2	Flow adjusting valve	For refrigerant flow adjusting
V4	Flow adjusting valve	For absorber solution flow adjusting
V5	Flow adjusting valve	For ejector solution flow adjusting
V6	Flow adjusting valve	For steam drain cooler solution flow adjusting
V8	Blow valve	For refrigerant blow
V10	Purge valve	Shut off valve for purge tank
V11	Purge valve (diaphragm)	Shut off valve for purge tank
V12	Purge valve	Upper abso. direct purge valve
V13	Purge valve	Abso. direct purge valve
V14	Purge valve (diaphragm)	Main purge shut off valve
V15	Purge valve	Lower abso. direct purge valve (255exe ~ only)
V16	Purge valve (diaphragm)	Abso. direct purge valve
V18	Purge valve	Cond. purge valve
V19	Purge valve	Cond. purge valve
V20	Purge valve	Cond. auto purge valve
V21	Purge valve (diaphragm)	Cond. direct purge valve
V30	Sampling valve	For solution sampling
V31	Sampling valve	For solution sampling
V32	Sampling valve	For solution sampling
V33	Sampling valve	For solution sampling
V34	Sampling valve	For refrigerant sampling
V35	Sampling valve	For refrigerant sampling
V37	Sampling valve	For solution sampling
NV1	Needle valve	For steam max flow adjust
CV1	Steam drain control valve	For steam flow adjust
SV1	Solenoid valve	Purge solenoid valve
SV2	Solenoid valve	Purge solenoid valve
SV3	Solenoid valve	Refrigerant blow solenoid valve
G101	Sight glass	Sight glass for ref. overflow
G102	Sight glass	Sight glass for eva. tank
G103	Sight glass	Sight glass for abs. tank
G105	Sight glass	Sight glass for generator

Table 2: Tag list for process and instrumentation diagram

Tag	Symbol	Item
RTD1		Chilled water inlet temperature
RTD2		Chilled water outlet temperature
RTD3		Refrigerant temperature
T/C1		Cooling water inlet temperature
T/C2		Cooling water outlet temperature
T/C3		Absorber solution temperature
T/C4		Generator solution temperature
TIC1	23A	Chilled water outlet temperature controller
P/T1		Purging tank pressure
P/T2		Generator pressure
TA1	26WL	Chilled water temperature switch
TA2	26RL	Refrigerant temperature switch
TA3	26SH	Solution temperature switch
THR1	TH1	Solution circulation pump thermal relay
THR2	TH2	Solution spray pump thermal relay
THR3	TH3	Refrigerant pump thermal relay
THR6	TH6	Purge pump thermal relay
PA1	69WC1	Chilled water pressure differential switch
PA2	63AP	Purge tank pressure switch
PA3	69WC2	Cooling water pressure differential switch
PA5	63SH2	Generator pressure switch
LVS1	33RL	Level switch for evaporator tank
PI1		Generator pressure gauge
PI2		Purge tank pressure gauge

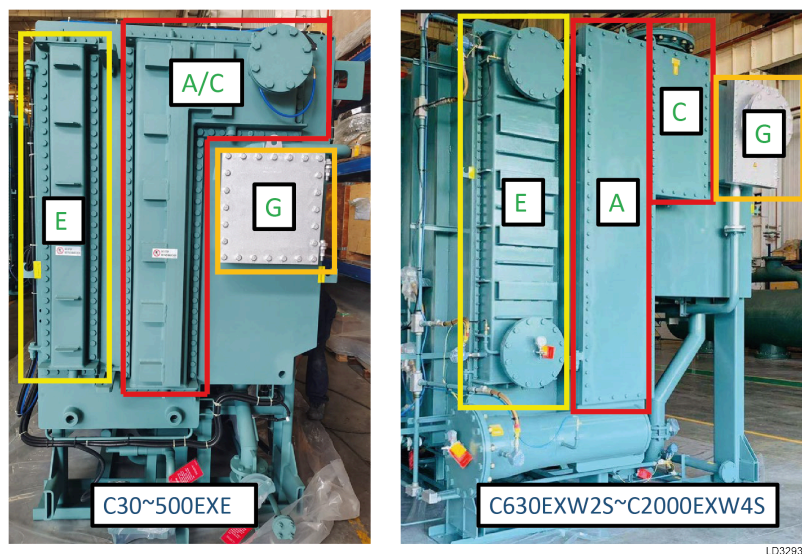
Unit components

Water box gasket

Table 3: Water box gasket

Description		Unit	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW2ST(L)	700 EXW2ST(L)	800 EXW2ST(L)	900 EXW2ST(L)	1000 EXW2ST(L)	1120 EXW4ST(L)	1250 EXW4ST(L)	1400 EXW4ST(L)	1500 EXW4ST(L)	1600 EXW4ST(L)	1680 EXW4ST(L)	1800 EXW4ST(L)	1900 EXW4ST(L)	2000 EXW4ST(L)														
Part name	Part number																																										
Sheet gasket for steam water box inlet side	094W05712-000	Pcs	TBD				1	1	1	1	1										TBD																						
	094W08343-000	Pcs										1	1	1	1																												
	094W08330-000	Pcs														1	1	1	1	1																							
Sheet gasket for steam water box return side	094W05713-000	Pcs					1	1	1	1	1																																
	094W08344-000	Pcs												1	1	1	1																										
	094W08331-000	Pcs																		1											1	1	1	1									
Note: The steam water box for model 30–65EXE and model 1120–2000ESW4S is TBD.																																											
Rope Gasket A for chilled water box	028W17640-013 1 set = 10 m	set	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2														
Rope Gasket B for chilled water box	028W03242-000	m	9	9	9	9	9	12	12	12	12	15	15	15	15	16	16	16	16	16	18	18	18	18	18	18	18	18	18														
Note: 1. The standard water pressure of the chilled water box is 10 bar. It uses the compact water box. Use rope gasket A. 2. The optional water pressure of the chilled water box is 20 bar. It uses the marine type water box, or the optional marine type chilled water box for 10 bar. If the chiller order date is after May 2019, use rope gasket B. Previous chillers with the marine type water box use the sheet type gasket. Check with the PTS team on a case-by-case basis. 3. Rope gasket A is also used for the partition gasket in the chilled water box.																																											
Sheet gasket for cooling water	028W17803-002 for absorber	Pcs														2	2	2	2	2																							
	028W17804-002 for Condenser	Pcs														2	2	2	2	2																							
	028W17805-002 For absorber	Pcs																			2	2	2	2	2	2	2	2	2														
	028W17806-002 For condenser	Pcs																			2	2	2	2	2	2	2	2	2														
Rope Gasket A for cooling water box	028W17640-013 1 set = 10 m	Set	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	4	4	4														
Rope Gasket B for cooling water box	028W03242-000	m	11	11	11	11	11	14	14	14	14	18	18	18	18	28	28	28	28	28	32	32	32	34	34	34	34	34	34														
Note: 1. The standard water pressure of the cooling water box is 10 bar. Chiller models up to and including C500EXET(L) use the compact water box. Use rope gasket A. 2. Chiller models C630EXW2ST(L) and up, with water pressure 10 bar, use the marine type water box. If the chiller order date is after May 2019, use Rope gasket B. For Chiller models under C630EXW2ST(L) that use the optional marine type water box, use the Rope gasket B. Chillers ordered before May 2019 use the sheet type gasket, as per the list. 3. The optional pressure for all models of cooling water box is 20 bar. Use the marine type water box. If the chiller order date is after May 2019, use Rope gasket B. Chillers ordered before May 2019 use the sheet type gasket. Check with the PTS team on a case-by-case basis. 4. Rope gasket A is also used for the partition gasket in cooling water box.																																											

Figure 4: Layout for various chiller models



C30~500EXE		C630EXW2S~C2000EXW4S	
Callout	Component	Callout	Component
A/C	Absorber and condenser	A	Absorber
E	Evaporator	C	Condenser
G	Generator	E	Evaporator
		G	Generator

Figure 5: Sheet gasket for CW/CHW water box

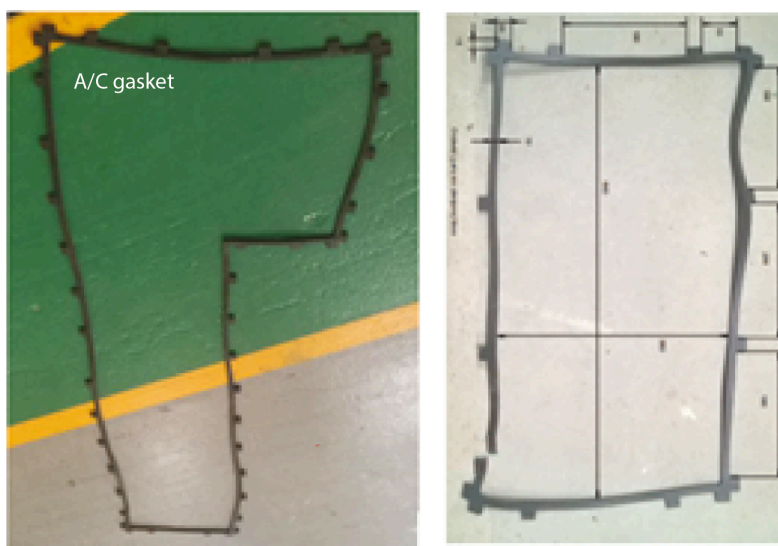
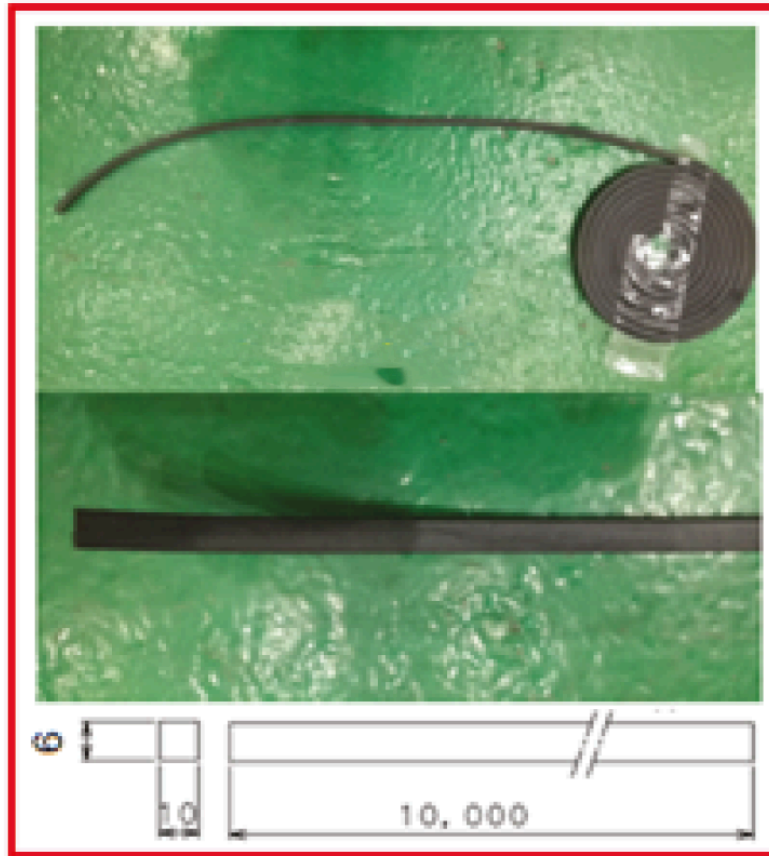
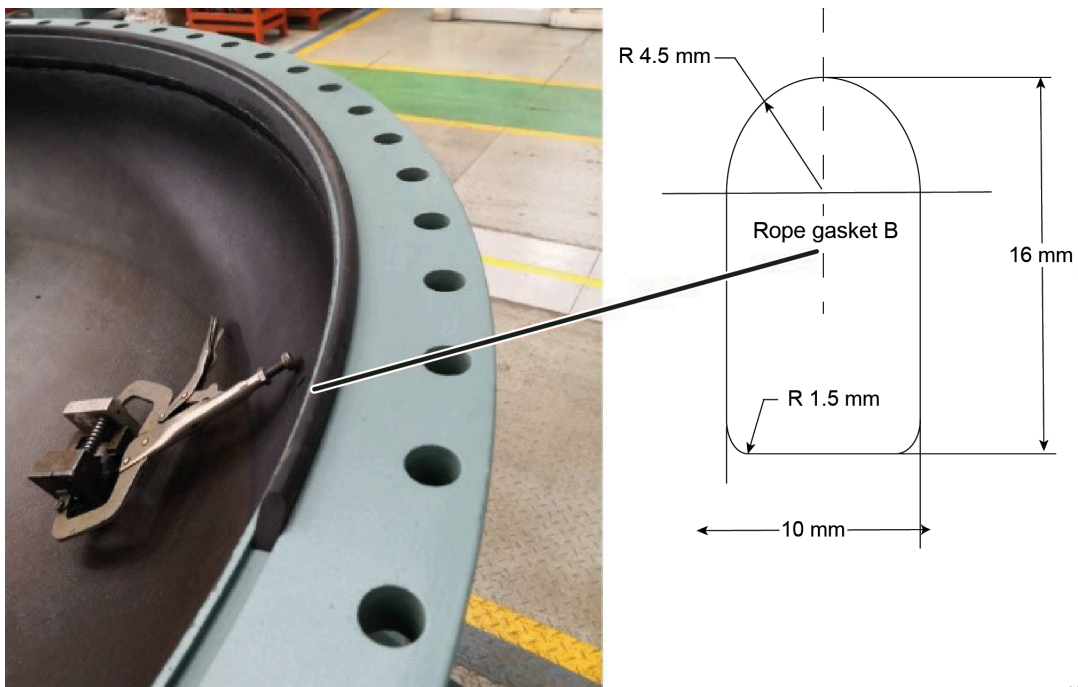


Figure 6: Rope gasket A



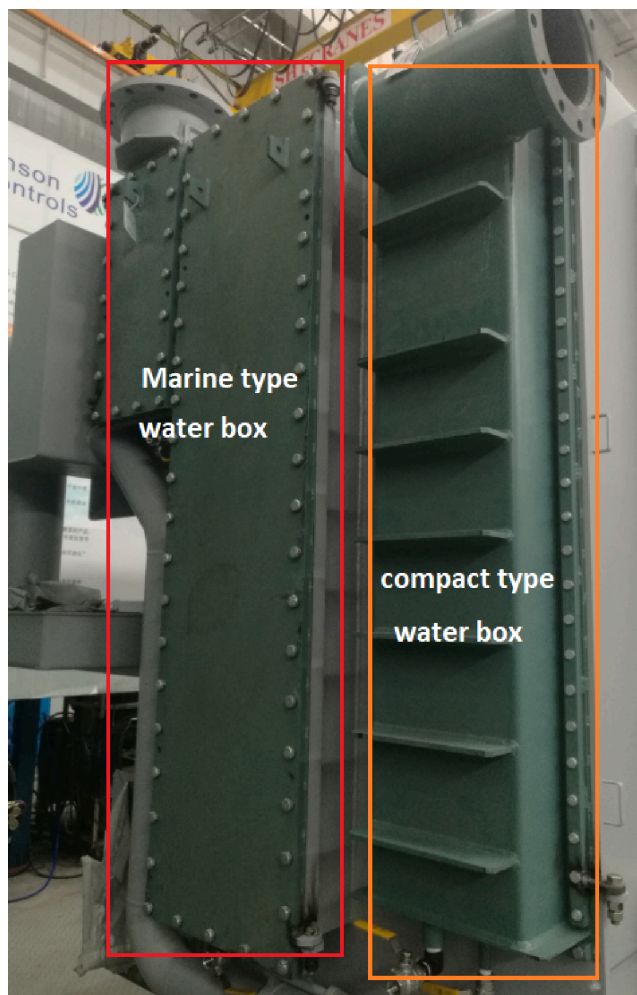
LD29529

Figure 7: Rope gasket B



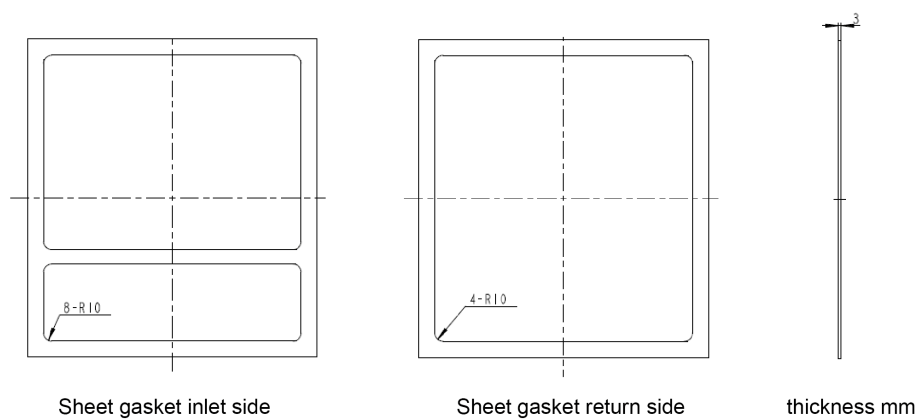
LD29531

Figure 8: Outline of compact and marine type water box



LD29872

Figure 9: Sheet gasket for steam water box



LD32937

Control panel components

Table 4: Control panel components

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Main	025W48016-039																											
Circuit Board (PLC)	TC5-17A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Main	025W51073-001																											
Circuit Board (PLC)*	TC5-17B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Harness kit for TC5-17B to replace TC5-17A *	371W09686-002																											
Note: The Toshiba PLC main circuit Board TC5-17A (025W48016-039) has been phased out since April 2021. Use TC5-17B (025W51073-001). However, because the size and shape of the connecting pins are different, when replacing the TC5-17A by TC5-17B, you must also buy the harness kit 371W09686-002.																												
Touch Panel (TP)	025W48016-129																											
	PFXGP4501TADW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SC-EQ board	031-03610-000																											
Modbus gateway module	025W51134-806																											
	MB3280+DK35A																											
SC-EQ installation kit	371W09489-701																											
Auxiliary Relay (PWX) for CE/GB	025W48016-131																											
	MY4N-GS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Auxiliary Relay (PWX) for UL	024W33874-140																											
	MY4N-GS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Timer (PWT) for CE/GB	025W48016-033																											
	H3Y-2(5sec)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Timer (PWT) for UL	024W33874-131																											
	H3Y-2-C 110Vac	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Power Supply (24VDC) (PSU1)	025W48016-037																											
	RS-75-24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Circuit Protector (CP1)	024W33919-732																											
	S202-C2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Circuit Breaker (MCCB) for GB and CE	025W48016-120																											
	XT1 N 160	1	1	1	1	1	1																					
	TMF20																											
	025W48016-121																											
	XT1 N 160							1	1	1	1	1	1	1														
	TMD32																											
	025W48016-122																											
	XT1 N 160														1	1	1	1	1									
	TMD40																											
	025W48016-151																											
	XT1 N 160																				1	1	1	1	1			
	TMD50																											
025W48016-123																												
XT1 N 160																										1	1	1
TMD63																												

Table 4: Control panel components

Description																													
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW2ST(L)	700EXW2ST(L)	800EXW2ST(L)	900EXW2ST(L)	1000EXW2ST(L)	1120EXW4ST(L)	1250EXW4ST(L)	1400EXW4ST(L)	1500EXW4ST(L)	1600EXW4ST(L)	1680EXW4ST(L)	1800EXW4ST(L)	1900EXW4ST(L)	2000EXW4ST(L)	
	Model																												
Circuit Breaker (MCCB) for UL 208V-60Hz	024W33919-774																												
	XT1N 125 TMF 30-500	1	1	1	1	1	1																						
	024W33919-773																												
	XT1N 125 TMF 35-500								1	1																			
	024W33919-769																												
	XT1N 125 TMF 45-500										1	1																	
	024W33919-792																												
	XT1N 125 TMF 50-500												1	1	1														
	024W33919-794															1	1												
	XT1N 125 TMF 70-700																												
	024W33919-766																												
	XT1N 125 TMF 80-800																1	1	1										
	024W33919-796																												
	XT1N 125 TMF 110-1100																				1	1	1	1	1	1			
	024W33919-798																												
	XT3N 225 TMF 150-1500																										1	1	1
Circuit Breaker (MCB1) for UL 460V-60Hz	024W33919-789																												
	XT1N 125 TMF 15-500	1	1	1	1	1	1	1	1																				
	024W33919-790																												
	XT1N 125 TMF 20-500									1	1																		
	024W33919-791																												
	XT1N 125 TMF 25-500												1	1	1														
	024W33919-774															1	1												
	XT1N 125 TMF 30-500																												
	024W33919-773																												
	XT1N 125 TMF 35-500																	1	1	1									
	024W33919-792																												
	XT1N 125 TMF 50-500																				1	1	1	1	1				
	024W33919-794																												
	XT1N 125 TMF 70-700																										1	1	1
Circuit Breaker Handle	025W48016-125																												
	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Circuit Breaker for GB/CE (MCB1)	024W33919-529																												
	S202-C3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Transformer (T1)	025W48016-130																												
	JBK3-500VA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Transformer (T1) for UL	025W43823-870																												
	50031-120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Transformer (T2) for UL	025W43823-871																												
	50120-1224	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Table 4: Control panel components

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Magnet Switch, (MC1, MC2, MC3, MC6) for GB and CE	024W33857-353	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2
	AX09-30-10-80																											
	024W33857-355											1	1	1	1	1	1	1	1	1	1	1	1	1				
	AX18-30-10-80																											
	024W33857-356																											
	AX25-30-10-80																				1	1	1	1	1	1	1	1
	024W33857-358																											
AX40-30-10-80																									1	1	1	
Magnet Switch MC1,MC2,M C3,MC6 for UL 208V-60Hz	024W33857-451	4	4	4	4	4	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1
	AF09-30-10-13																											
	024W33857-453								1	1	1	2	2	2	2	1	1	1	1	1						1	1	1
	AF16-30-10-13																											
	024W33857-454																											
	AF26-30-10-13																				1	1	1	1	1			
	024W33857-452															1	1	1	1	1								
	AF30-30-10-13																											
	024W33857-457																											
	AF52-30-10-13																				1	1	1	1	1	1	1	1
	024W33857-458																											
AF65-30-10-13																									1	1	1	
Magnet Switch MC1, MC2, MC3, MC6 for UL 460V-60Hz	024W33857-451	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2	2	2
	AF09-30-10-13																											
	024W33857-450																				1	1	1	1	1			
	AF12-30-10-13																											
	024W33857-453															1	1	1	1	1								
	AF16-30-10-13																											
	024W33857-454																											
	AF26-30-10-13																				1	1	1	1	1	1	1	1
024W33857-452																												
AF30-30-10-13																									1	1	1	
Thermal Relay (TH1, TH2, TH3, TH6) for GB and CE	025W48016-065	1	1	1	1	1	1	1	1																			
	TA25DU-1.4M																											
	025W48016-064										1	1	1	1	1	1	1	1	1									
	TA25DU-1.8M																											
	025W44341-346	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	TA25DU-2.4M																											
	025W48016-128	2	2	2	2	2	2	1	1																			
	TA25DU-4.0M																											
	025W48207-038																											
	TA25DU-5.0M																				1	1	1	1	1	1		
	025W48016-127																											
	TA25DU-6.5M								1	1	2	2	1	1														
	025W48207-039																											
	TA25DU-8.5M												1	1	1	1	1	1	1							1	1	1
	024W33860-061																											
	TA25DU-14M																				1	1	1	1	1			
	024W33860-077															1	1	1	1	1								
	TA25DU-19M																											
	024W33860-078																											
	TA25DU-25M																				1	1	1	1	1	1	1	1
024W33860-059																												
TA25DU-32M																									1	1	1	

Table 4: Control panel components

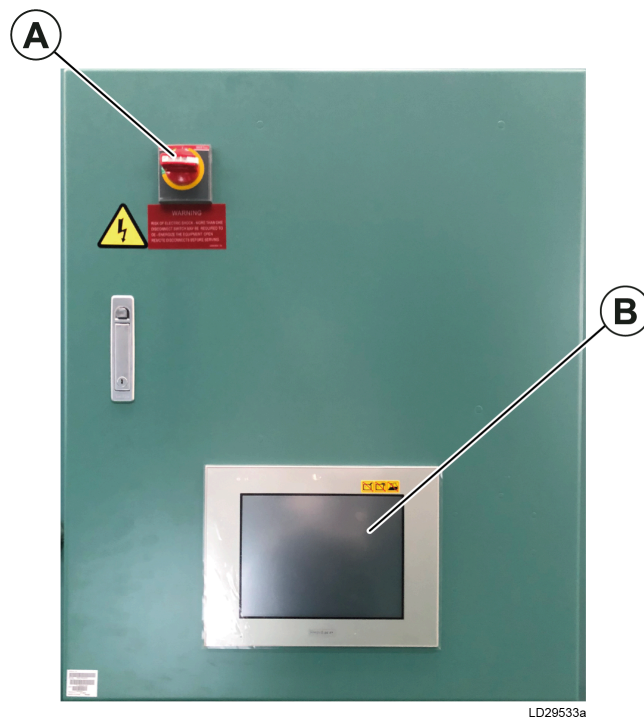
Description																													
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)	
	Model																												
Motor starter MMS1, MMS2, MMS3, MMS6 for UL 208V-60Hz	024W33919-760																												
	MS132-4.0-HKF1-11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	
	024W33919-748																												
	MS132-6.3-HKF1-11	2	2	2	2	2	2	1	1																				
	024W33919-802																												
	MS132-10-HKF1-11																1	1	1	1	1	1	1	1	1				
	024W33919-746																												
	MS132-16-HKF1-11								1	1	2	2	2	2	2	1	1	1	1	1							1	1	1
	024W33919-803																												
	MS132-20-HKF1-11																				1	1	1	1	1	1			
	024W33919-759																												
	MS132-32-HKF1-11															1	1	1	1	1							1	1	1
	024W33919-804																												
	MS165-42-HKF1-11																				1	1	1	1	1	1	1	1	1
Motor starter MMS1, MMS2, MMS3, MMS6 for UL 460V-60Hz	024W33919-749																												
	MS132-1.6-HKF1-11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													
	024W33919-750																												
	MS132-2.5-HKF1-11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	024W33919-760																												
	MS132-4.0-HKF1-11	2	2	2	2	2	2	1	1								1	1	1	1	1	1	1	1	1				
	024W33919-748																												
	MS132-6.3-HKF1-11								1	1	2	2	1	1	1	1	1	1	1							1	1	1	
	024W33919-802																												
	MS132-10-HKF1-11												1	1	1						1	1	1	1	1	1			
	024W33919-746																												
	MS132-16-HKF1-11														1	1	1	1	1										
	024W33919-803																												
	MS132-20-HKF1-11																				1	1	1	1	1	1	1	1	
	024W33919-767																												
	MS132-25-HKF1-11																									1	1	1	
Noise Filter (NF0) for CE	025W48016-055	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	CW7N-60A-R																												
Noise Filter (NF1)	025W48016-038	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	RSAN-2006D																												
56-Pin Connector 1	025W48016-068	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
56-Pin Connector 2	025W48016-069	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	FCN-361J056-AU																												
Buzzer (BZ)	025W48016-071	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	CB1-620B																												
Fan (FAN) UL	025W48016-057	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	ACi 4400 HH-504																												
Fan (FAN) GB/CE	025W48016-056																												
	4656Z																												
Fan-protector (FAN)	025W48016-134																												
	FU-8812B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Table 4: Control panel components

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Fan-filter	025W48016-136 FU-9803A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Battery for Main Circuit Board	025W51225-000 CR2032	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Battery for Main Touch Panel	025W51226-000 PFXZCBBT1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Note: The electrical parts are for IP42.

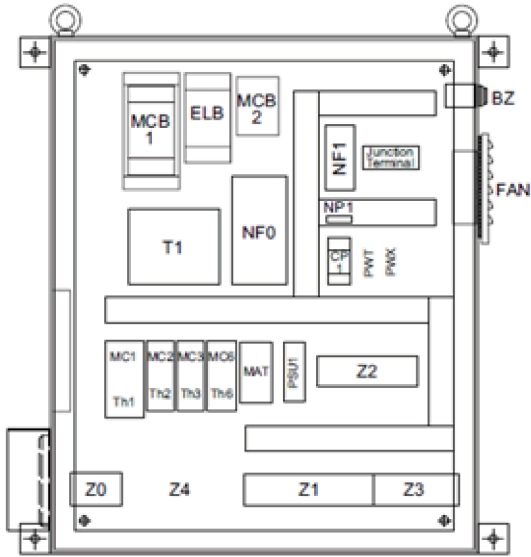
Figure 10: Control panel cover



LD29533a

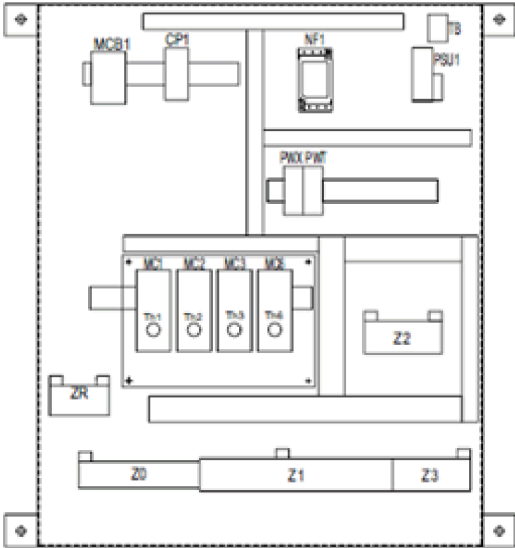
Callout	Components
A	Breaker handle
B	TP (10.4 inch/color)

Figure 11: Interior control panel for CE



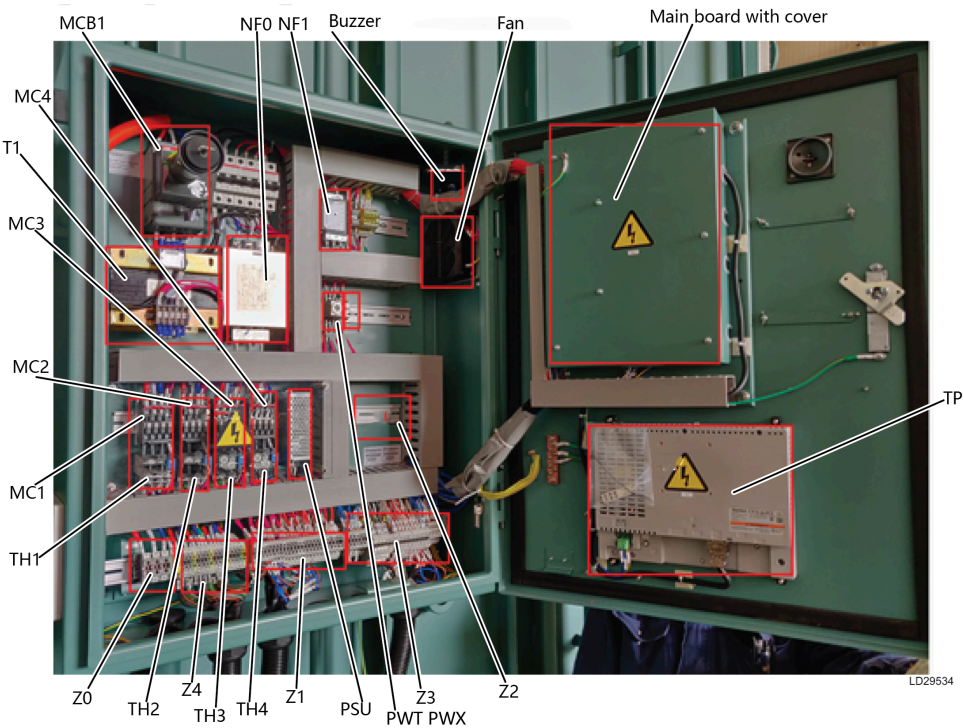
LD32006

Figure 12: Interior control panel for GB



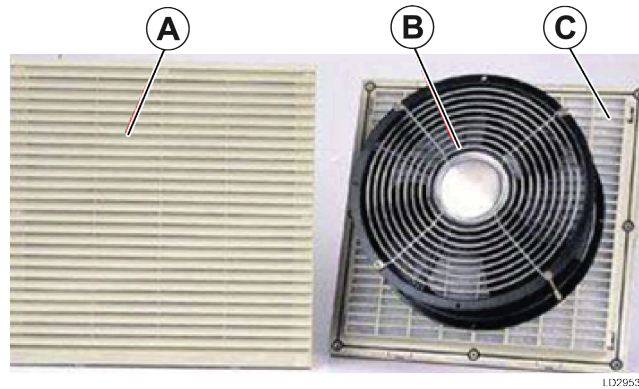
LD32007

Figure 13: Reference layout of internal control panel



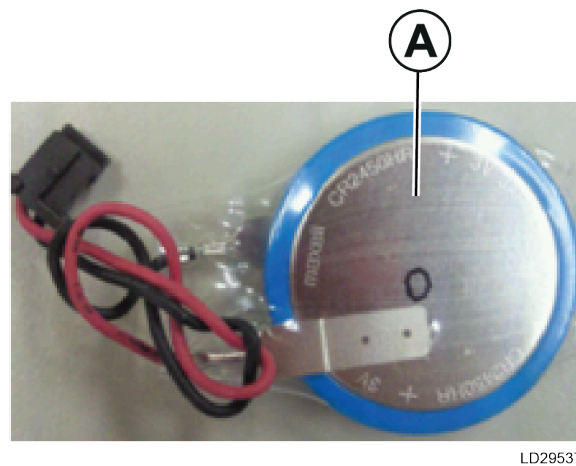
LD29534

Figure 14: Fan, fan protector, and fan filter



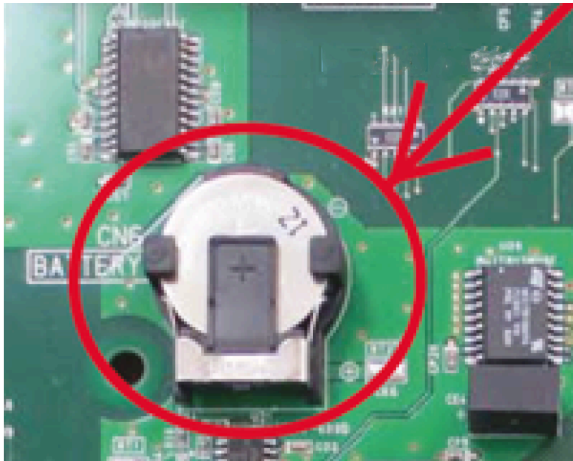
Callout	Component
A	Fan protector
B	Fan
C	Fan filter

Figure 15: Battery for touch screen



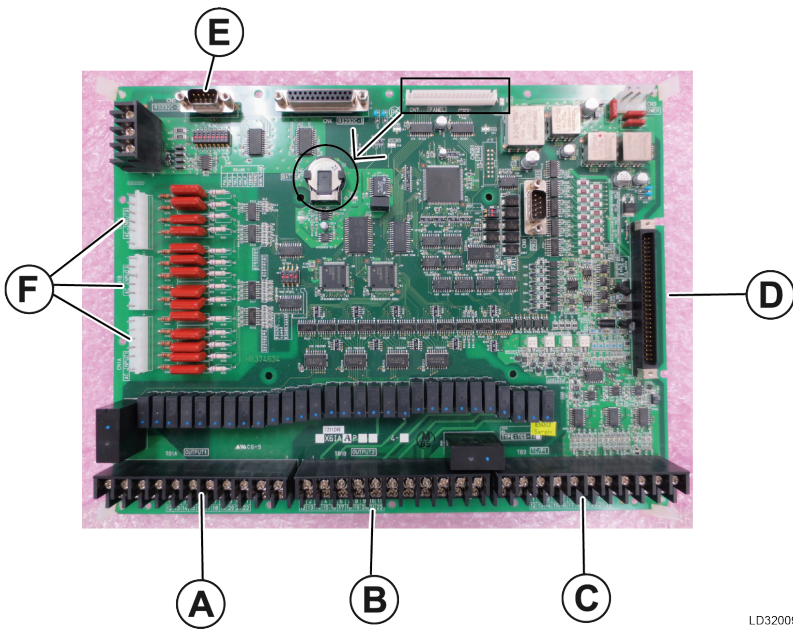
Callout	Component
A	Battery for touch screen

Figure 16: Main board battery



LD29538

Figure 17: PLC board



LD32009a

Callout	Component
A	TB1A relay output
B	TB1B relay output
C	TB2 TC/RTD input
D	CN2 24V I/O sign CN2 to analog I/O
E	To touch screen
F	CN1A. CN1B, CN1C 115V input signal

Pump and maintenance kits

Table 5: Pump and maintenance kits

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Solution circulation pump (AC380-415/50Hz)	026W50009-001																											
	NP50-30B2/115 H4-B-3	1	1	1	1	1	1																					
	026W50010-001																											
	NP80-40B/212H 4-F-4							1	1	1	1																	
	026W49986-001																											
	NP100-50B/213 H4-F-3											1	1	1														
	026W50365-001																											
	NP100-60C/312 H4-F-6														1	1	1	1	1									
	026W49914-001																											
	NP125-80E/421H 4-F-2																			1	1	1	1	1	1			
	026W51260-046																											
	NP150-100F/521 H4-F-1																									1	1	1
Solution circulation pump (AC380-400V/60Hz)	026W51260-007																											
	NP50-30B2/115 H4-A-3	1	1	1	1	1	1																					
	026W51260-013																											
	NP80-40B/212H 4-E-4							1	1	1	1																	
	026W51260-020																											
	NP100-50B/213 H4-E-3											1	1	1														
	026W50365-004																											
	NP100-60C/312 H4-E-6														1	1	1	1	1									
	026W51260-036																											
	NP125-80E/421H 4-E-2																			1	1	1	1	1	1			
	026W51260-047																											
	NP150-100F/521 H4-E-1																									1	1	1
Solution circulation pump (AC460V/60 Hz))	026W51260-009																											
	NP50-30B2/115 H4-A-3	1	1	1	1	1	1																					
	026W51260-015																											
	NP80-40B/212H 4-E-4							1	1	1	1																	
	026W51260-022																											
	NP100-50B/213 H4-E-3											1	1	1														
	026W51230-000																											
	NP100-60C/312 H4-E-6														1	1	1	1	1									
	026W51260-038																											
	NP125-80E/421H 4-E-2																			1	1	1	1	1	1			
	026W51260-049																											
	NP150-100F/521 H4-E-1																									1	1	1

Table 5: Pump and maintenance kits

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Solution spray pump (AC380-415V /50Hz)	026W50008-001																											
	NP50-30B2/115 H4-B-4	1	1	1	1	1	1	1																				
	026W49987-001																											
	NP100-50B/212 H4-F-8									1	1	1	1	1														
	026W50369-000																											
	NP100-50D/321 H4-F-3														1	1	1	1	1									
	026W49915-001																											
	NP125-80D/322 H4-F-3																			1	1	1	1	1	1			
026W50420-000																												
NP150-100E/421 H4-F-1																									1	1	1	
Solution spray pump (AC380-400V /60Hz)	026W51260-052																											
	NP50-30B2/115 H4-A-4	1	1	1	1	1	1	1	1																			
	026W51260-063																											
	NP100-50B/212 H4-E-8									1	1	1	1	1														
	026W51260-066																											
	NP100-50D/321 H4-E-3														1	1	1	1	1									
	026W51260-072																											
	NP125-80D/322 H4-E-3																			1	1	1	1	1	1			
026W51260-077																												
NP150-100E/421 H4-E-1																									1	1	1	
Solution Spray Pump(AC460 V/60Hz)	026W51260-054																											
	NP50-30B2/115 H4-A-4	1	1	1	1	1	1	1	1																			
	026W51260-065																											
	NP100-50B/212 H4-E-8									1	1	1	1	1														
	026W51260-068																											
	NP100-50D/321 H4-E-3														1	1	1	1	1									
	026W51260-074																											
	NP125-80D/322 H4-E-3																			1	1	1	1	1	1			
026W51260-079																												
NP150-100E/421 H4-E-1																									1	1	1	

Table 5: Pump and maintenance kits

Description																													
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)	
	Model																												
Refrigerant pump (AC380-415V /50Hz)	026W50006-001																												
	NP40-20A2/121 H4-B-6	1	1	1	1	1	1	1	1																				
	026W49988-001																												
	NP50-30C2/122 H4-B-5									1	1	1	1	1															
	026W50344-001																												
	NP65-40C/122H 4-B-9														1	1													
	026W50370-000																												
	NP100-50A/115 H4-B-1																1	1	1										
	026W49916-001																												
	NP100-50C/222 H4-F-5																				1	1	1	1	1	1			
	026W50418-001																												
NP125-80D/321 H4-F-1																									1	1	1		
Refrigerant pump (AC380-400V /60Hz)	026W51260-085																												
	NP40-20A2/121 H4-A-6	1	1	1	1	1	1	1	1																				
	026W51260-089																												
	NP50-30C2/122 H4-A-5									1	1	1	1	1															
	026W51260-097																												
	NP65-40C/122H 4-A-9														1	1													
	026W51260-099																												
	NP100-50A/115 H4-A-1																1	1	1										
	026W51260-105																												
	NP100-50C/222 H4-E-5																				1	1	1	1	1	1			
	026W51260-110																												
NP125-80D/321 H4-E-1																									1	1	1		
Refrigerant pump (AC460V/60 Hz)	026W51260-087																												
	NP40-20A2/121 H4-A-6	1	1	1	1	1	1	1	1																				
	026W51260-091																												
	NP50-30C2/122 H4-A-5									1	1	1	1	1															
	026W50671-000																												
	NP65-40C/122H 4-A-9														1	1													
	026W51260-101																	1	1	1									
	NP100-50A/115 H4-A-1																												
	026W51260-107																												
NP100-50C/222 H4-E-5																				1	1	1	1	1	1				
026W51260-112																													
NP125-80D/321 H4-E-1																									1	1	1		

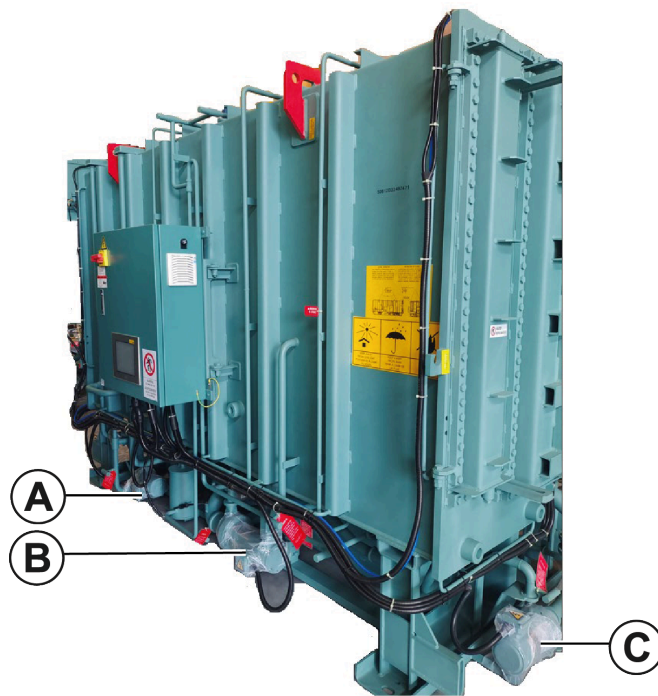
Table 5: Pump and maintenance kits

Description																													
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW2ST(L)	700EXW2ST(L)	800EXW2ST(L)	900EXW2ST(L)	1000EXW2ST(L)	1120EXW4ST(L)	1250EXW4ST(L)	1400EXW4ST(L)	1500EXW4ST(L)	1600EXW4ST(L)	1680EXW4ST(L)	1800EXW4ST(L)	1900EXW4ST(L)	2000EXW4ST(L)	
	Model																												
Maintenance parts kit for solution circulation pump	Can replace the whole pump	N/A	N/A	N/A	N/A	N/A	N/A																						
	NP50-30B2/115																												
	026W51221-002							1	1	1	1																		
	NP80-40B/212																												
	026W51221-003												1	1	1														
	NP100-50B/213																												
	026W51221-004															1	1	1	1	1									
	NP100-60C/312																												
	026W51221-005																												
	NP125-80E/421																				1	1	1	1	1	1			
026W51221-006																													
NP150-100F/521																										1	1	1	
Maintenance parts kit for solution spray pump	Can replace the whole pump for NP50-30B2/115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A																				
	026W51222-003									1	1	1	1	1															
	NP100-50B/212															1	1	1	1	1									
	026W51222-004																												
	NP100-50D/321																												
	026W51222-005																												
	NP125-80D/322																				1	1	1	1	1				
	026W51222-006																												
NP150-100E/421																									1	1	1		
Maintenance parts kit for refrigerant pump	Can replace the whole pump for NP40-20A2/121	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A																				
	Can replace the whole pump for NP50-30C2/122									N/A	N/A	N/A	N/A	N/A															
	026W51223-003															1	1												
	NP65-40C/122																												
	026W51223-004																	1	1										
	NP100-50A/115																		1	1	1								
	026W51223-005																												
	NP100-50C/222																				1	1	1	1	1	1			
	026W51223-006																												
NP125-80D/321																										1	1	1	
Gasket kit for solution circulation pump	093W76652-001	1	1	1	1	1	1																						
	NP50-30B2/115																												
	093W76652-002							1	1	1	1																		
	NP80-40B/212																												
	093W76652-002												1	1	1														
	NP100-50B/213																												
	093W76652-003															1	1	1	1	1									
	NP100-60C/312																												
	093W76652-004																												
	NP125-80E/421																				1	1	1	1	1	1			
093W76652-005																										1	1	1	
NP150-100F/521																													
Gasket kit for solution spray pump	093W76652-001	1	1	1	1	1	1	1	1																				
	NP50-30B2/115																												
	093W76652-002									1	1	1	1	1															
	NP100-50B/212																												
	093W76652-006															1	1	1	1	1									
	NP100-50D/321																												
	093W76652-006																				1	1	1	1	1	1			
	NP125-80D/322																												
	093W76652-004																												
NP150-100E/421																										1	1		

Table 5: Pump and maintenance kits

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW2ST(L)	700EXW2ST(L)	800EXW2ST(L)	900EXW2ST(L)	1000EXW2ST(L)	1120EXW4ST(L)	1250EXW4ST(L)	1400EXW4ST(L)	1500EXW4ST(L)	1600EXW4ST(L)	1680EXW4ST(L)	1800EXW4ST(L)	1900EXW4ST(L)	2000EXW4ST(L)
	Model																											
Gasket kit for refrigerant pump	093W76652-001	1	1	1	1	1	1	1	1																			
	NP40-20A2/121																											
	093W76652-007									1	1	1	1	1														
	NP50-30C2/122																											
	093W76652-008														1	1												
	NP65-40C/122																											
	093W76652-009																1	1	1									
	NP100-50A/115																											
	093W76652-010																				1	1	1	1	1	1		
	NP100-50C/222																											
093W76652-006																									1	1	1	
NP125-80D/321																												
Vacuum pump (AC380~415V/50Hz;400~460V/60Hz) for standard or IP54	026W49989-000																											
	PVD-N360-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Vacuum pump (AC200/220 50Hz60Hz)	026W50677-001																											
	PVD-N360-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance parts kit for vacuum pump	026W50889-000																											
	PVD-N360-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Vacuum pump V-belt	026W50890-000																											
	PVD-N360-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Note: The maintenance parts kit is suitable for various power supply pumps. A pump maintenance kit is not available for canned pump models NP40 or NP50. To replace these models, buy the whole pump.



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Callout	Component
A	Refrigerant pump
B	Solution circulation pump
C	Solution spray pump

Figure 18: Vacuum pump



LD29541

Table 6: Maintenance parts kit for solution and refrigerant pump (example)

Part number	Part list
026W51221-002	Front bearing
	Rear bearing
	Front shaft sleeve
	Rear shaft sleeve
	Front thrust collar
	Rear thrust collar
	Sealing gasket for casing
	Sealing gasket for rear bearing housing
	Lock washer for front end of shaft

 **Note:** The parts vary depending on the pump model. The adjust washer is not available.

Table 7: Maintenance parts kit for vacuum pump

Part number	Part list
026W50889-000	Oil seal
	Deep groove ball bearing 1
	Deep groove ball bearing 2
	Oil level gauge
	First blade spring
	Second blade spring
	Exhaust valve plate
	Exhaust valve plate spring
	Composite seal gasket
	Gas ballast valve gasket
	O-ring for PVD-N360
	V-belt

Valves

Table 8: Valves

Description																												
Part name	Part name	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Diaphragm Valve(15A)	022W13281-001 —	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diaphragm for Diaphragm Valve (15A)	028W18178-000 —	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diaphragm Valve Haimen (15A)*	022W13807-001 —	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diaphragm for Valve Haimen (15A) *	022W13807-101 —	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
V11: purge valve from purging tank																												
V14: main purging valve																												
V16: purging valve from absorber																												
V21: purging valve from condenser (directly purging)																												
*Note: If the chiller order date is after December 2019, use the Haimen Diaphragm valve. The original Diaphragm valve and Diaphragm gasket are no longer available,so you must use the Haimen valve as a replacement.																												
Solenoid Valve for Purge Line and Ref. Blowing Line (AC200) for GB/CE	025W48003-002 AB41-04-8-D-3M (AC220V)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Solenoid Valve for Purge Line And Ref. Blowing Line (AC110) for UL	025W48003-001 AB41-04-8-D-3M(AC110V)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Solenoid Valve for Purge Line and Ref. Blowing Line UL AC24 IP65	025W51242-003 AB41-04-8-D-3I (24VDC)																											
Check Valve for purge line	022W13235-000 —	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Check Valve for purge line China	022W13235-101 —																											
SV1: vacuum purging solenoid valve																												
SV2: vacuum purging solenoid valve																												
SV3: refrigerant blowing solenoid valve																												
Note: If the chiller order is later than November 2020, replace the check valve with the localized type.																												
Sampling Valve	022W13372-000 —	6	7	6	6	6	6	6	6	5	7	7	7	7	9	9	8	8	8	8	8	8	8	10	10	10	10	10
O-Ring for sampling valve P21	028W18176-000 —	6	7	6	6	6	6	6	6	5	7	7	7	7	9	9	8	8	8	8	8	8	8	10	10	10	10	10

Table 8: Valves

Description																														
Part name	Part name	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)		
	Model																													
O-Ring for Adjusting and Sampling Valve P16	028W18177-000																													
	—	24	25	24	24	24	24	20	20	17	21	21	21	21	19	19	18	18	18	23	21	21	21	23	23	23	23	23		
V30: solution sampling valve before the solution circulation pump																														
V31: solution sampling valve after solution circulation pump																														
V32: solution sampling valve before solution spray pump																														
V33: solution sampling valve after solution spray pump																														
V34: refrigerant sampling valve before the refrigerant pump																														
V35: refrigerant sampling valve after the refrigerant pump																														
V37: solution sampling valve after the generator																														
Pressure Release Valve for GB	322W13373-001	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	SAFTY-V/10A 0.8bar																													
Pressure Release Valve for CE	022W14372-000																													
	SAFTY-V/10A 0.48bar																													
Oseco Rupture disk for UL(1.5") 12 PSIG	026W51293-000	1	1	1	1	1	1	1	1	1	1	1																		
	PL15-124-A																													
Oseco Rupture disk for UL(2") 12 PSIG	026W51295-000													1	1	1	1	1	1	1	1									
	PL02-125-A																													
Oseco Rupture disk for UL(3") 12 PSIG	026W51297-000																													
	PLR03-126-A																													
Huali Rupture disk kits (DN80) for GB UL 12 PSIG	326W50681-102	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	—																													
Huali Rupture disk kits (DN50) for GB UL 12 PSIG	326W50681-202																													
	—																													
Huali Rupture disk kits (DN80) for CE 7 PSIG	393W73906-000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	—																													
Huali Rupture disk (DN80) 7PSIG CE	026W50860-101	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	YF80-0.048-121A																													
Huali Rupture disk (DN50) 12PSIG GB UL	026W50861-201	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1									
	YF50-0.083-121A																													

Table 8: Valves

Description																													
Part name	Part name																												
	Model	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW2ST(L)	700EXW2ST(L)	800EXW2ST(L)	900EXW2ST(L)	1000EXW2ST(L)	1120EXW4ST(L)	1250EXW4ST(L)	1400EXW4ST(L)	1500EXW4ST(L)	1600EXW4ST(L)	1680EXW4ST(L)	1800EXW4ST(L)	1900EXW4ST(L)	2000EXW4ST(L)	
Huali Rupture disk (DN80) 12PSIG GB UL	026W50861-101																												
	YF80-0.083-121A																					1	1	1	1	1	1	1	
BS&B Rupture disc (DN50) 0.4 Barg	026W51936-000																												
	AVV 2"																												
- The pressure release valve is located on the purging tank as standard for GB and CE. For orders placed after September 2021, the pressure release valve for CE uses 022W14372-000. - The rupture disc assessor is located on the generator shell side. Use the 12PSI rupture disc instead of 7 PSIG for UL for orders after August 2019. - As of October 2020, the Oseco rupture disc kit has been replaced by the Huali rupture disc kit. When replacing the Oseco rupture disc, replace it with the Huali disc kit. - The BS&B 0.4 barg rupture disc is only used for specific projects.																													
1																													
Air Vent Valve for Water Box(option)	022W13246-002																												
	BALL-V/10A	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Position: on the top of front and back water box																													
Drain Valve for Water Box(option)	022W13246-004																												
	BALL-V/20A	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Position: on the bottom of front and back water box																													
Needle valve	022W13368-003	1	1	1	1																								
	NPT3/8 (DN10)																												
	022W13368-004					1	1																						
	NPT1/2 (DN15)																												
	022W13368-005								1	1																			
	NPT3/4 (DN20)																												
	022W13368-006										1	1	1	1	2	2	2	2	2	2									
Steam drain solenoid valve for 200V for GB/CE	NPT1 (DN25)									1	1	1	1	2	2	2	2	2	2										
	025W51242-101	1	1	1	1	1	1	1	1	1	1																		
	AP11-20A-C4M-AC200V																												
	025W51242-102											1	1	1															
	AP11-25A-C4M-AC200V																												
	025W51242-103														1	1	1	1											
	AP21-32A-C4M-AC200V																												
Steam drain solenoid valve for 100V for UL	025W51242-104																			1									
	AP21-40A-C4M-AC200V																												
	025W51242-801	1	1	1	1	1	1	1	1	1	1																		
	AP11-20A-C4M-AC100V																												
	025W51242-802												1	1	1														
	AP11-25A-C4M-AC100V																												
	025W51242-105																												
Steam drain solenoid valve for 100V for UL	AP21-32A-C4M-AC100V														1	1	1	1											
	025W51242-108																												
	AP21-40A-C4M-AC100V																			1									

Table 8: Valves

Description																												
Part name	Part name	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Steam drain control valve	022W13362-001																											
	AVF-6202-6330 (DN20)	1	1	1	1	1	1	1	1	1																		
	022W13362-002																											
	AVF-6203-6330 (DN25)										1	1	1	1	1	1												
	022W13362-003																											
	AVF-6204-6330 (DN32)																		1	1								
	022W13362-004																											
AVF-6205-6330 (DN40)																				1								
Actuator for steam drain control valve	022W13362-901																											
	EVL-1862	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
Electrical board for actuator	022W13362-801																											
	EPA60.3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
Steam drain strainer	022W13806-103	1	1	1	1																							
	UY 20A 80mesh																											
	022W13806-104						1	1	1	1	1																	
	022W13806-105											1	1	1	1													
	UY 32A 80mesh																											
	022W13806-106																											
	UY 40A 80mesh															1	1	1	1	1								
Float Valve for Refrigerant tank	322W13803-000	1	1	1	1	1	1	1	1	1	1	1	1	1														
	REF-FLOAT/32A																											
	022W13382-000																											
	REF-FLOAT/50A															1	1	1										
	322W13896-000																											
REF-FLOAT/65A																		1	1	1	1	1	1	1	1	1	1	
Position: in the refrigerant tank.																												

Position: in the refrigerant tank.

Table 9: Valves (continued)

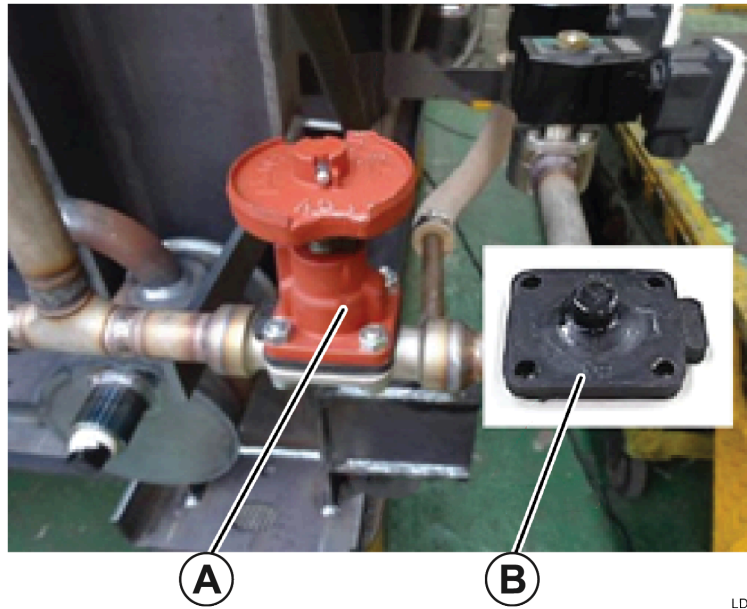
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Part name	Part number																											
	Model																											
Globe valve	022W13370-002											1	2	3	2	2	2	2	1									
	V/50A 20#																											
	022W13370-003														1				1	1	1	1	1	1				
	V/65A 20#																											
	022W13370-004															1	1	1	1	1	1	1	1	1	1	1	1	
	V/80A 20#																											
	022W13370-005																									1	1	1
V/100A 20#																												
Cupper Packing for Globe Valve (40A)	021W35469-001	1	2	2	2	2	2	6	6	7	7	4	4	3	2	2	2	2	2									
	—																											
Cupper Packing for Globe Valve (65A)	021W35469-002											1	2	3	3	3	3	3	3	2	2	2	2	2	2	2	2	
	—																											

Table 9: Valves (continued)

Description																												
Part name	Part number	30EXET(L)	40EXET(L)	50EXET(L)	65EXET(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630EXW25T(L)	700EXW25T(L)	800EXW25T(L)	900EXW25T(L)	1000EXW25T(L)	1120EXW45T(L)	1250EXW45T(L)	1400EXW45T(L)	1500EXW45T(L)	1600EXW45T(L)	1680EXW45T(L)	1800EXW45T(L)	1900EXW45T(L)	2000EXW45T(L)
	Model																											
Adjusting Valve	022W13371-001 V/15A SUS304	11	11	11	11	11	11	11	11	11	13	13	13	13	4	4	4	4	4	8	6	6	6	6	6	6	6	6
	022W13371-002 V/25A SUS304	7	7	7	7	7	7	3	3	1	1	1	1	1	6	6	6	6	6	7	7	7	7	7	7	7	7	7
	022W13371-003 V/40A SUS304	1	2	2	2	2	2	6	6	7	7	4	4	3	2	2	2	2	2									
VH: shut off valve for Generator pressure gauge VI: shut off valve for pressure release valve VJ: shut off valve for Ref. blowing solenoid valve VK: shut off valve for Ref. blowing solenoid valve V1: for Generator solution flow adjusting V2: for refrigerant flow adjusting					V4: for absorber solution flow adjusting V5: for Ejector solution flow adjusting V6: for ejector solution flow adjusting V8: for refrigerant blow V10: shout off valve for purge tank V12: Upper absorber direct purge valve											V13: absorber purge valve V15: lower absorber direct purge valve V15: lower absorber direct purge valve V18: condenser direct purge valve V19: condenser purge valve V20: condenser purge valve												
Butterfly Valve(option)	022W13280-010 700G-1T(50A)	3	3	3	3	2	2	1	1	2	2	3	3	3	1	1	1	1	1									
	022W13280-011 700G-1T (65A)					1	1	1	1						3	1				1	1	1	1	1	1	1	1	1
	022W13280-012 700G-1T (80A)							1	1	2	2	1	1	1	2	2	2	2	2									
	022W13280-013 700G-1T (100A)											1	1	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	022W13280-015 700G-1T (125A)																			2	2	2	2	2	2	2	2	2
VA: butterfly valve before the solution circulation pump VB: butterfly valve after the solution circulation pump VC: butterfly valve before the solution spray pump VD: butterfly valve after the solution spray pump VE: butterfly valve before the refrigerant pump VF: butterfly valve after the refrigerant pump																												

① **Note:** The quantity of globe valves and adjusting valves varies depending on the chiller order. When placing the order, measure the size of these valves.

Figure 19: Diaphragm valve and diaphragm gasket



LD29542

Callout	Component
A	Diaphragm valve
B	Diaphragm gasket

Figure 20: Check valve



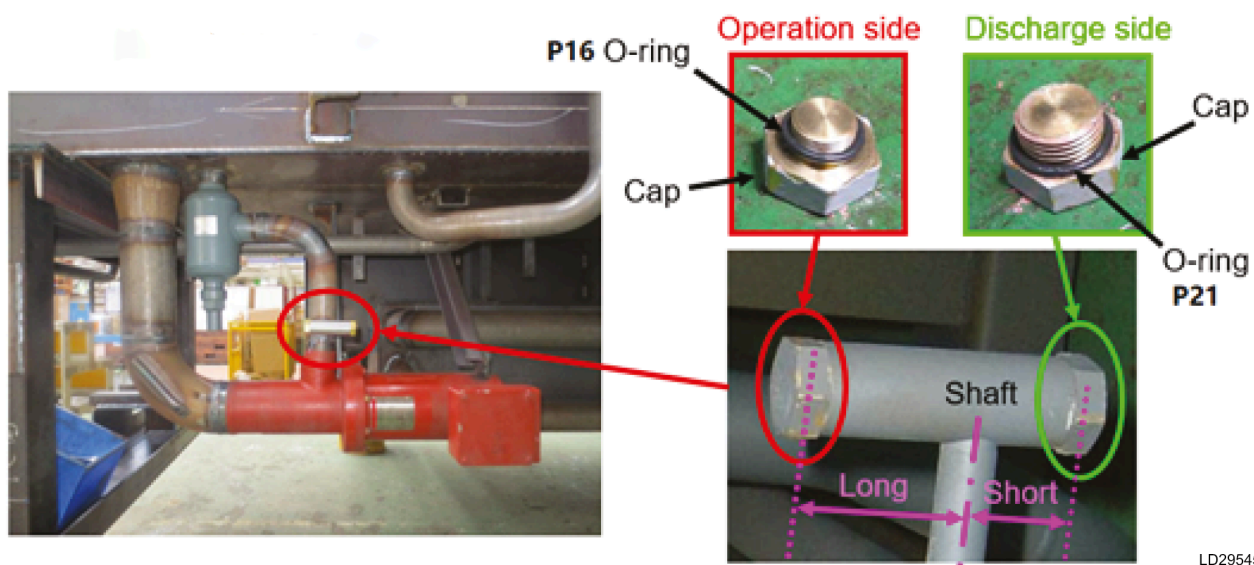
LD29543

Figure 21: Solenoid valve for purge and blow pump



LD29544

Figure 22: Sampling valve



LD29545

Figure 23: Oseco rupture disc kit



LD29547

Figure 24: Huali rupture disc kit



Figure 25: Huali rupture disc



LD33115

Figure 26: Needle valve



LD31591

Figure 27: Refrigerant water float ball valve



LD29548

Figure 28: Steam drain solenoid valve



LD31589

Figure 29: Actuator for drain control valve



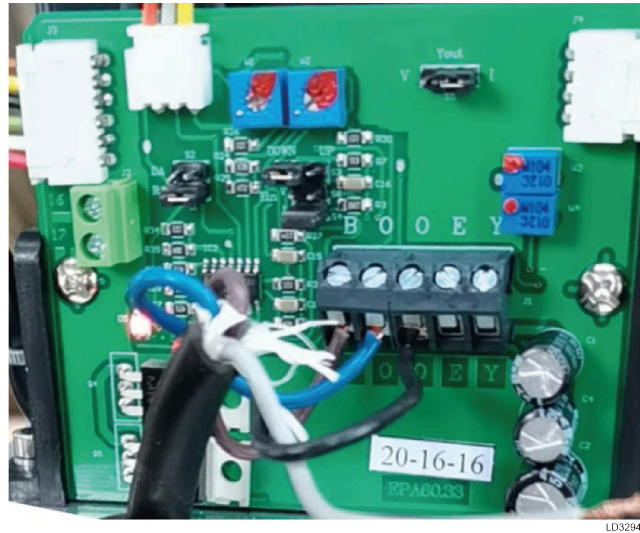
LD32940

Figure 30: Steam strainer



LD31590

Figure 31: Electric board for actuator



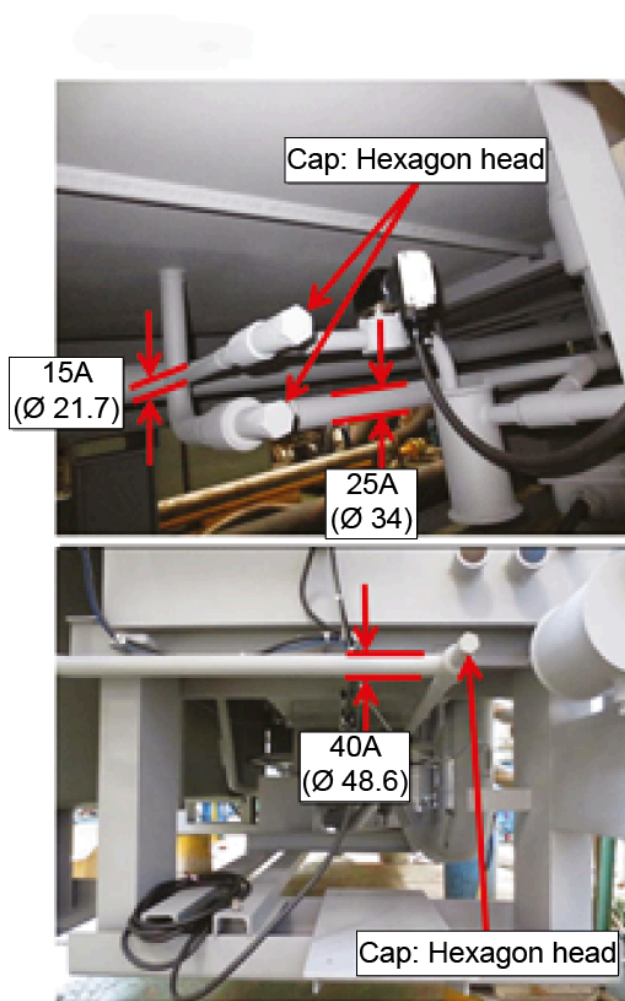
LD32941

Valve names, part number and model

Table 10: Valve sizes

Size code	15A	25A	40A	50A	65A	80A	100A	125A	150A
Diameter, mm	21.7	34	48.6	60	76	89	114	140	165

Figure 32: Adjusting valve

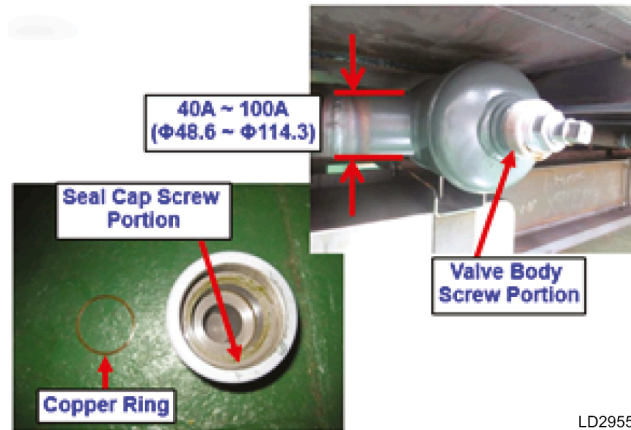


LD29549

Table 11: Adjusting valve part number and model

Valve name	Part number	Valve model
Adjusting valve	022W13371-001	V-15A
	022W13371-002	V-25A
	022W13371-003	V-40A

Figure 33: Globe valve

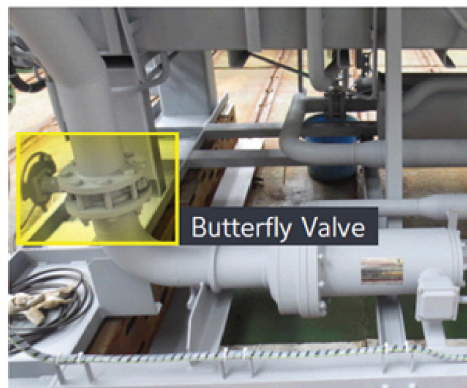


LD29550

Table 12: Globe valve part number and model

Valve name	Part number	Valve model
Globe valve	022W13370-002	V-50A
	022W13370-003	V-65A
	022W13370-004	V-80A
	022W13370-005	V-100A

Figure 34: Butterfly valve

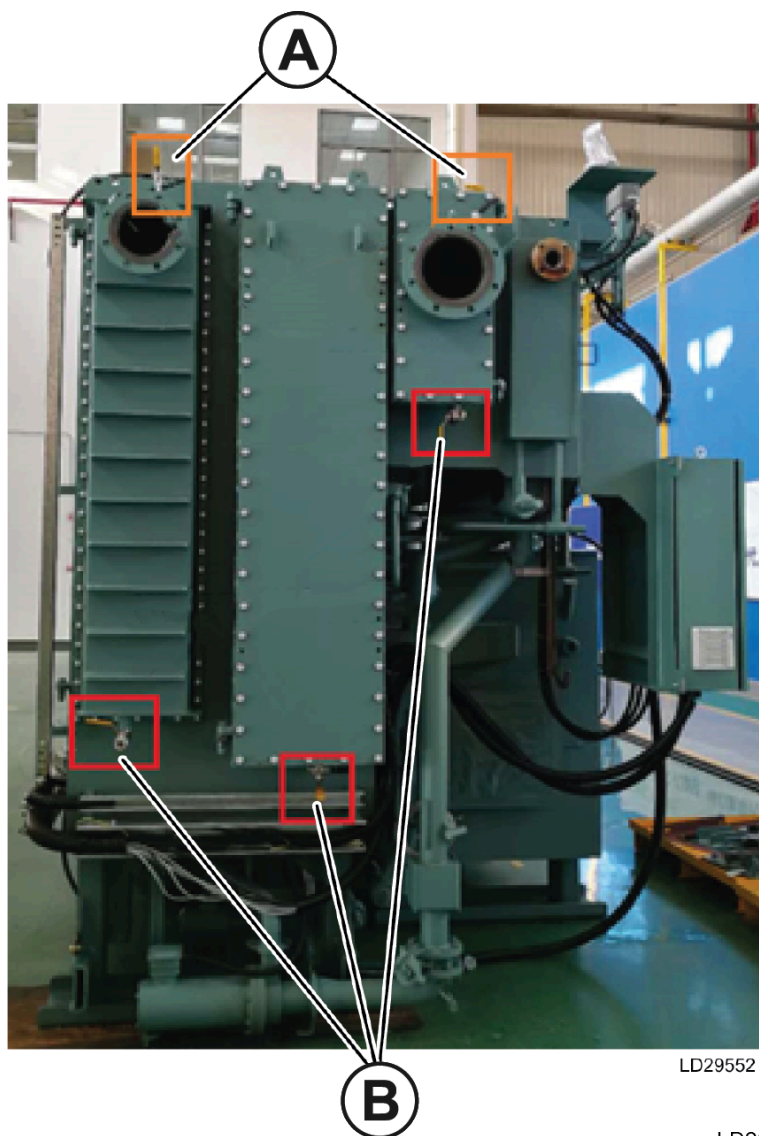


LD29551

Table 13: Butterfly valve part number and model

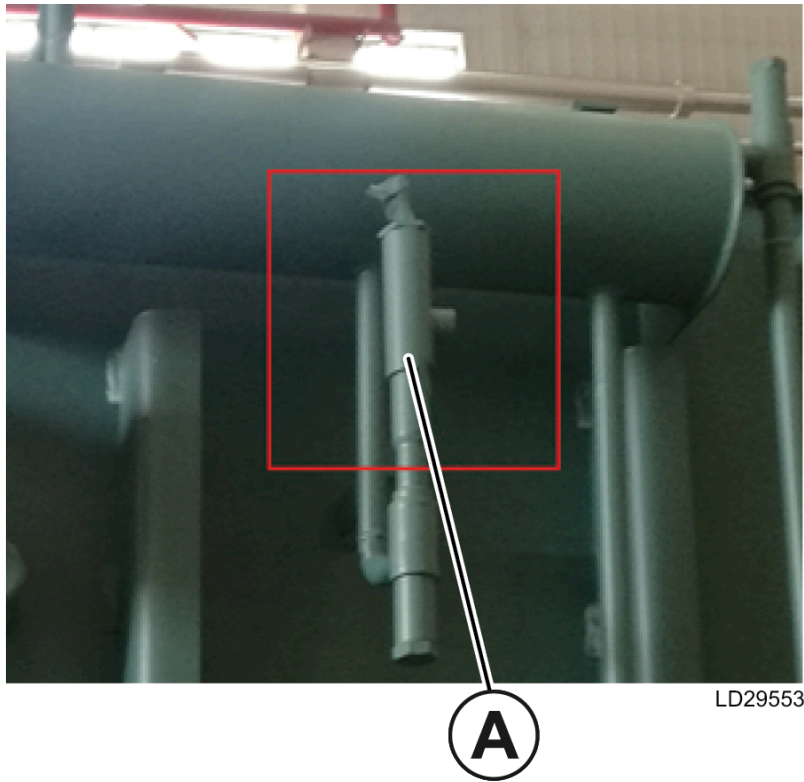
Valve name	Part number	Valve model
Butterfly valve (option)	022W13280-010	V-50A
	022W13280-011	V-65A
	022W13280-012	V-80A
	022W13280-013	V-100A
	022W13280-015	V-150A

Figure 35: Air vent and water drain valve



Callout	Component
A	Air vent valve
B	Water drain valve

Figure 36: Pressure release valve



Callout	Component
A	Pressure release valve

Sensor and control switch

Table 14: Sensor and control switch

Description																																						
Part name	Part number	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW25T(L)	700 EXW25T(L)	800 EXW25T(L)	900 EXW25T(L)	1000 EXW25T(L)	1120 EXW45T(L)	1250 EXW45T(L)	1400 EXW45T(L)	1500 EXW45T(L)	1600 EXW45T(L)	1680 EXW45T(L)	1800 EXW45T(L)	1900 EXW45T(L)	>2000 EXW45T(L)										
	Model																																					
Resistance Temp. Sensor (RTD-1,RTD -2)	025W47992-001 WZPKT-2906A (10m)	2	2	2	2	2	2	2	2	2	2	2	2	2						TBD																		
	025W48061-002 WZPKT-2906A (15m)														1	1	1	1	1																			
	025W48061-006 WZPKT-2906A (17m)														1	1	1	1	1																			
	025W47994-001 WZPKT-1906 (7m)	1	1	1	1	1	1	1	1	1	1	1	1	1																								
	025W47994-003 WZPKT-1906 (15m)														1	1	1	1	1																			
Thermocouple (T/C1, T/ C2,)	025W47997-015 WRNT-106A (12m)										2	2	2	2						TBD																		
	025W47997-001 WRNT-106A (10m)	2	2	2	2	2	2	2	2	2																												
	025W48063-016 WRNT-106A (17m)														2	2	2	2	2																			
	025W47999-012 WRNT-106 (12m)										1	1	1	1																								
	025W47999-008 WRNT-106 (7m)	1	1	1	1	1	1	1	1	1	1	1	1	1																								
Thermocouple (T/C3, T/C4)	025W47999-011 WRNT-106 (10m)	1	1	1	1	1	1	1	1	1					1	1	1	1	1																			
	025W47999-010 WRNT-106 (17m)														1	1	1	1	1																			
First Resistance Temp. Sensor with connector, well and cable * (RTD-1,RTD -2)	025W51243-001 FST600-103X(sho rt)(12m)	2	2	2	2	2	2	2	2	2	2	2	2	2																								
	025W51243-003 FST600-103X (long)(12m)														1	1	1	1	1	1	1	1	1	1	1	1	1	1										
	025W51243-002 FST600-103X(sho rt) (20m)																																					
	025W51243-004 FST600-103X (long) (20m)														1	1	1	1	1	1	1	1	1	1	1	1	1	1										
First Resistance Temp. Sensor with connector, well and cable * (RTD-3)	025W51244-002 FST600-103A(sh ort)(20m)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										
First Resistance Temp. Sensor with connector *	025W51243-010 FST600-103X(sho rt)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y																								
	025W51243-011 FST600-103X (long)														Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y										

Table 14: Sensor and control switch

Description																												
Part name	Part number	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW2ST(L)	700 EXW2ST(L)	800 EXW2ST(L)	900 EXW2ST(L)	1000 EXW2ST(L)	1120 EXW4ST(L)	1250 EXW4ST(L)	1400 EXW4ST(L)	1500 EXW4ST(L)	1600 EXW4ST(L)	1680 EXW4ST(L)	1800 EXW4ST(L)	1900 EXW4ST(L)	>2000 EXW4ST(L)
	Model																											
First Thermocouple with connector, well and cable*(T/C1, T/C2,)	025W51245-001																											
	FST600-102K(short)(12m)	2	2	2	2	2	2	2	2	2	2	2	2	2														
	025W51245-003																											
	FST600-102K(long) (12m)														1	1	1											
	025W51245-002																											
	FST600-102K(short)(20m)																											
	025W51245-004																											
	FST600-102K(long) (20m)														1	1	1	2	2	2	2	2	2	2	2	2	2	2
First Thermocouple with connector and cable*(T/C3, T/C4)	025W51246-002																											
	FST600-102X (20m)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
First Thermocouple with connector *(T/C1, T/C2)	025W51245-011																											
	FST600-102K(short)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y														
	025W51245-012																											
	FST600-102K(long)														Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
First Thermocouple with connector *(T/C3, T/C4)	025W51246-011																											
	FST600-102X																											
1.* The first brand temperature sensor, which has a wire connector, replaces the original temperature sensor. Therefore, when replacing the temperature signal you do not need to replace the cable. Use 025W51243-010 or 025W51243-011 for the Resistance Temp sensor, and 025W51245-011 or 025W51245-012, 025W51246-011 for the Thermocouple.																												
2. Either the long type or short type sensor (RTD-1,RTD-2, T/C1, T/C2) may be needed depending on the size of the chilled water and cooling water pipes. Check the specification on a case-by-case basis.																												
3. When using the first temperature sensor to replace the original temperature sensor, replace the sensor with the cable the first time, then replace the sensor with connector in future.																												
Armored Thermocouple IP65 First	025W50985-001																											
	WRNKT-50985K L100																											
	025W50985-002																											
	WRNKT-50985K L120																											
	025W50985-003																											
	WRNKT-50985K L150																											
	025W50985-004																											
	WRNKT-50985K L200																											
	025W50985-005																											
	WRNKT-50985K L250																											

- 1.* The first brand temperature sensor, which has a wire connector, replaces the original temperature sensor. Therefore, when replacing the temperature signal you do not need to replace the cable. Use 025W51243-010 or 025W51243-011 for the Resistance Temp sensor, and 025W51245-011 or 025W51245-012, 025W51246-011 for the Thermocouple.
2. Either the long type or short type sensor (RTD-1,RTD-2, T/C1, T/C2) may be needed depending on the size of the chilled water and cooling water pipes. Check the specification on a case-by-case basis.
3. When using the first temperature sensor to replace the original temperature sensor, replace the sensor with the cable the first time, then replace the sensor with connector in future.

Table 14: Sensor and control switch

Description																													
Part name	Part number	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW2ST(L)	700 EXW2ST(L)	800 EXW2ST(L)	900 EXW2ST(L)	1000 EXW2ST(L)	1120 EXW4ST(L)	1250 EXW4ST(L)	1400 EXW4ST(L)	1500 EXW4ST(L)	1600 EXW4ST(L)	1680 EXW4ST(L)	1800 EXW4ST(L)	1900 EXW4ST(L)	>2000 EXW4ST(L)	
	Model																												
Armored Resistance temp. sensor IP65 First	025W50986-001																												
	WZPKT-50986 L100																												
	025W50986-002																												
	WZPKT-50986 L120																												
	025W50986-003																												
	WZPKT-50986 L150																												
	025W50986-004																												
	WZPKT-50986 L200																												
	025W50986-005																												
WZPKT-50986 L250																													
Note:																													
1. The armored type thermocouple and resistance temp sensor are only for the IP65 and SQ projects.																													
2. The sensor length selection depends on the pipe size and the design. Confirm the model during the purchase.																													
Pressure Sensor (PT1,PT2)	025W47983-000 PA-838-102A-10-064	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
First Pressure Sensor* (PT1,PT2)	025W51239-002 FST800-501A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Cable with connector for First pressure sensor UL	025W51209-999 2m cable with connector for UL																												
Cable with connector for First pressure sensor CE/GB	025W51209-998 2m cable with connector for CE/GB																												
Note: 1. 1.* The First brand pressure sensor, which has a wire connector, replaces the original pressure sensor. 2. The First brand pressure sensor has the cable connector. When replacing the original pressure sensor, you must use the connector in order to connect the first brand sensor. Therefore, when purchasing the replacement, you must also purchase the cable with connector.																													
Level Switch (33RL)	024W39631-000 KS3-1S-10593	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Level Switch (33RL) new	025W51239-024 GYW-07-57																												
Level switch is localized, will use the 025W51239-024 to replace 024W39631-000																													
Differential Pressure Relay (69WC1, 69WC2(opti on))	024W39662-002 WFS10006BA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Density meter for Low chilled water supply type chiller	025W51047-002 Proline Promass I 300																												

Figure 37: RDT temperature sensor

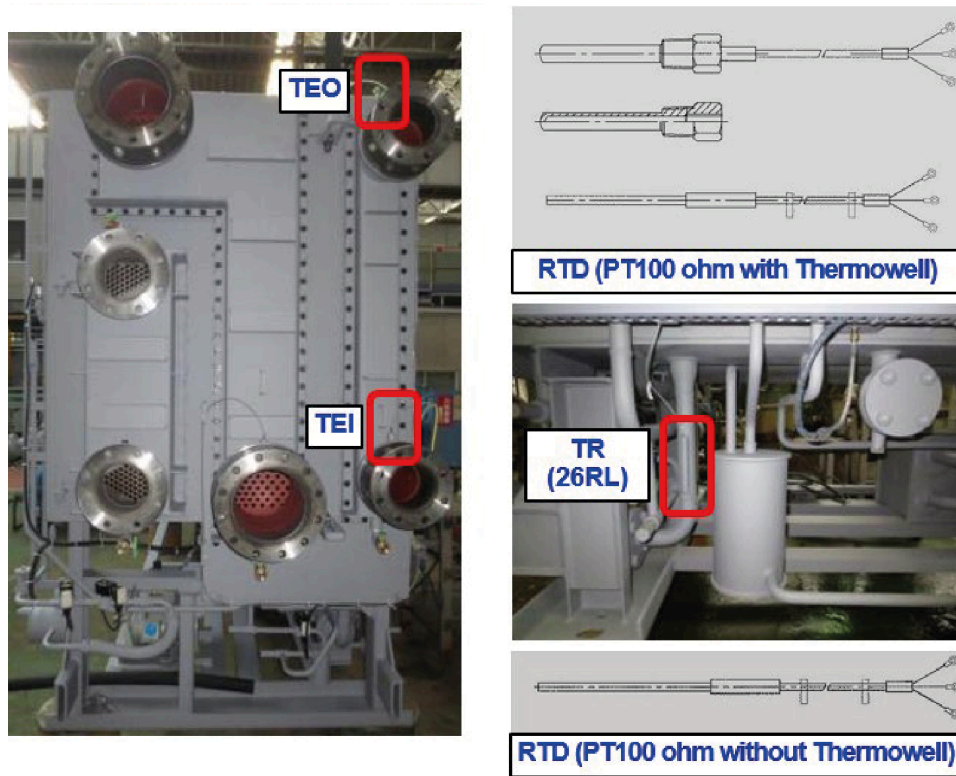


Figure 38: Thermocouple temperature sensor

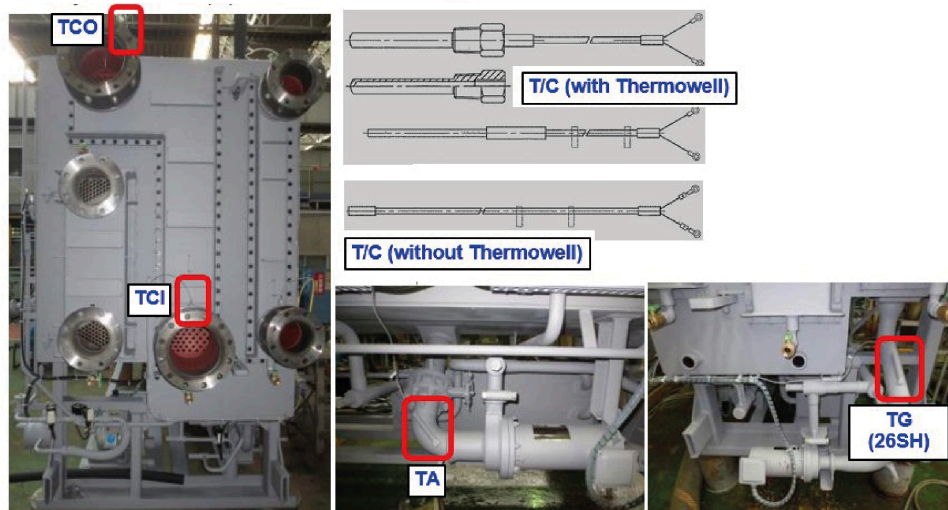


Figure 39: Pressure differential switch



Figure 40: Pressure sensor



Figure 41: Level switch



Figure 42: First pressure sensor

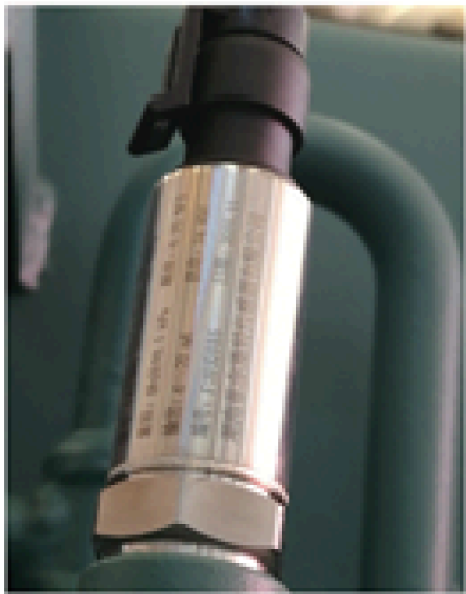
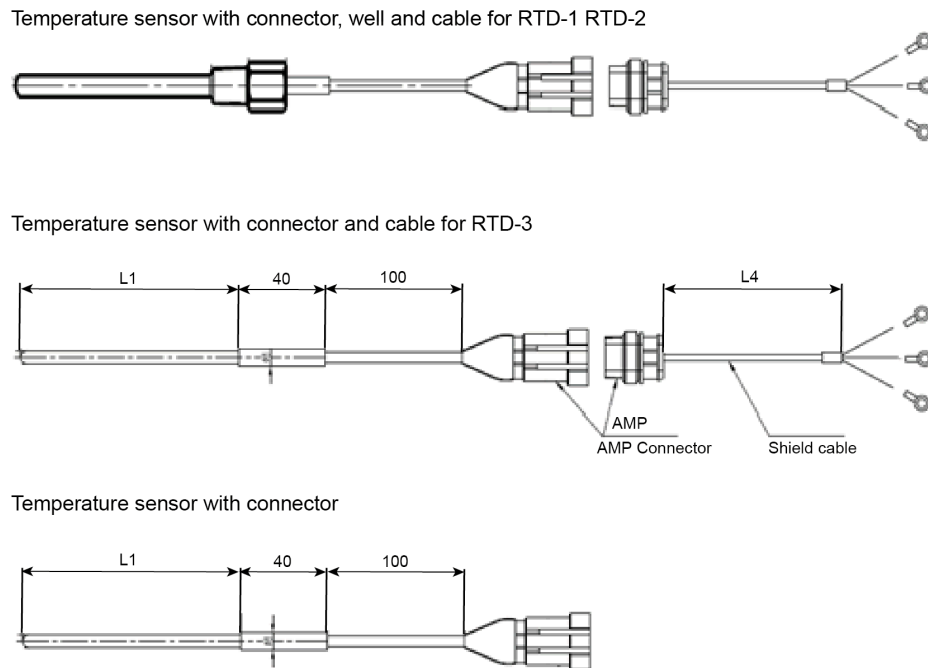


Figure 43: Density meter for low-chilled water supply type chiller



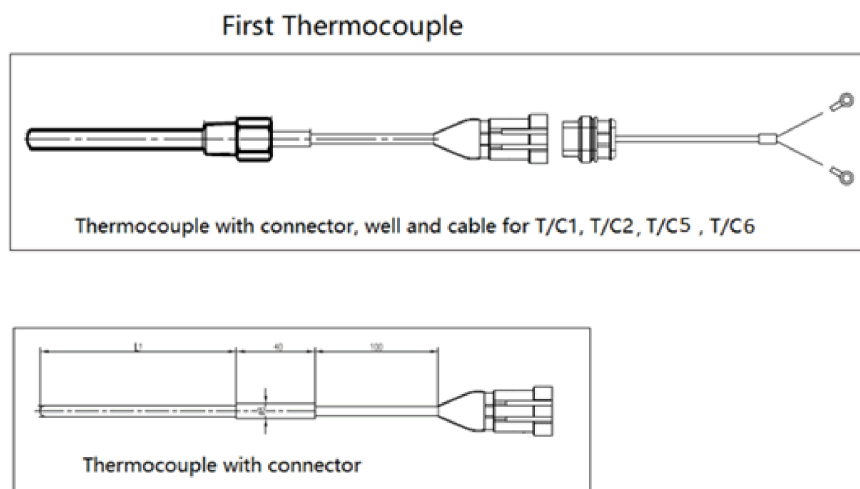
Figure 44: First resistance temperature sensor for RTD1, RTD2, and RTD3



LD31294

- ① **Note:** The cable lengths are as follows:
- L1 = 80 mm (short)
L1 = 180 mm (long)
 - L4 = 12 m or 20 m depending on the type

Figure 45: First thermocouple for T/C1, T/C2, T/C5, and T/C6

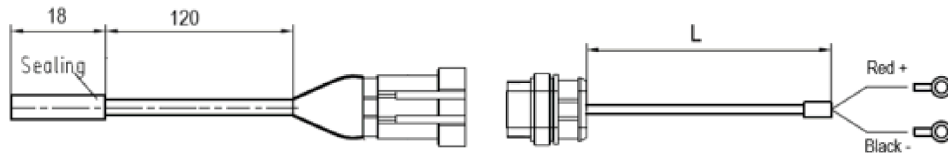


LD32018

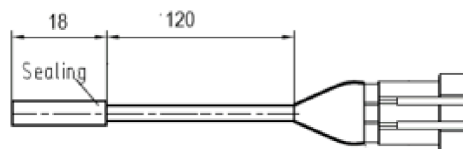
- ① **Note:** The cable lengths are as follows:
- L1 = 80 mm (short)
L1 = 180 mm (long)
 - L4 = 12 m or 20 m depending on the type

Figure 46: First thermocouple for T/C3 and T/C4 (mm)

Thermocouple with connector and cable for T/C3 and T/C4

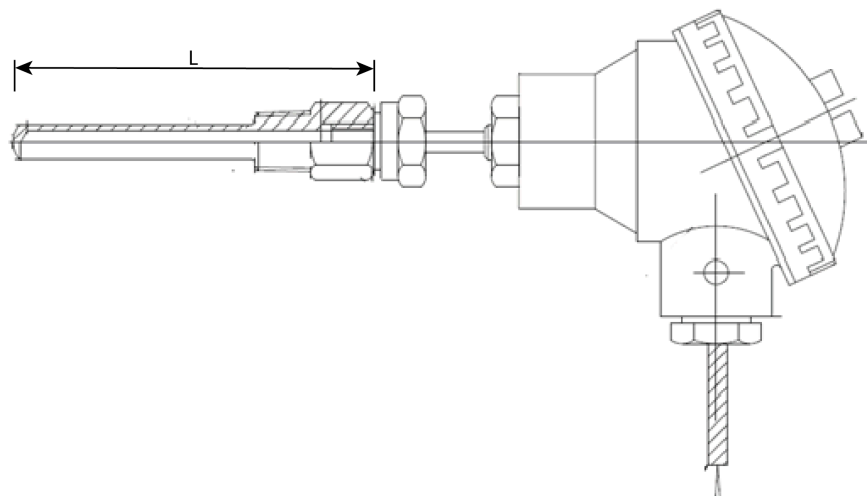


Thermocouple with connector for T/C3 and T/C4



LD32012

Figure 47: Armored type thermocouple IP65

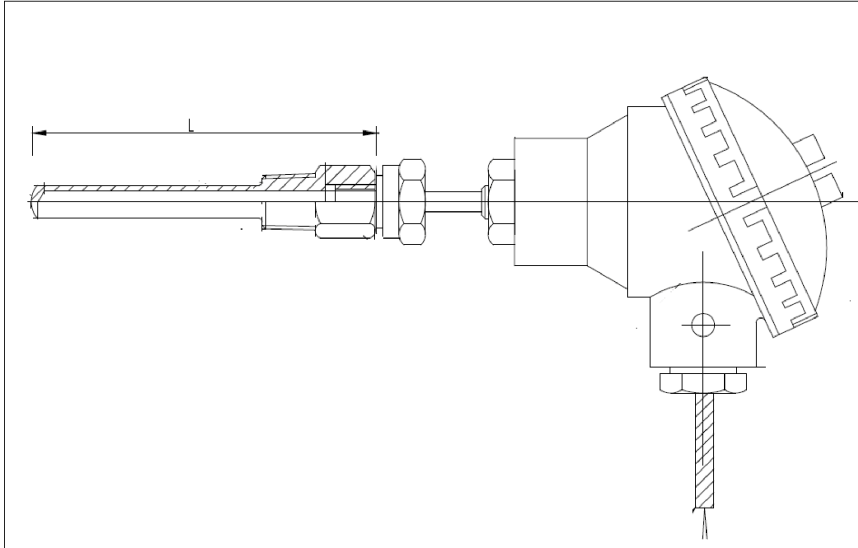


LD31297

Table 15: Part numbers and sizes of Armored type thermocouples

Part number	L (mm)	Pipe size
025W50985-001	100	DN65-80
025W50985-002	120	DN100-125
025W50985-003	150	DN150-200
025W50985-004	200	DN250-300
025W50985-005	250	DN350-450

Figure 48: Armored type resistance temperature sensor IP65



Part number	L (mm)	Pipe size
025W50986-001	100	DN65~80
025W50986-002	120	DN100~125
025W50986-003	150	DN150~200
025W50986-004	200	DN250~300
025W50986-005	250	DN350~450

Other parts

Table 16: Other parts

Description																													
Part name	Part number	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW2ST(L)	700 EXW2ST(L)	800 EXW2ST(L)	900 EXW2ST(L)	1000 EXW2ST(L)	1120 EXW4ST(L)	1250 EXW4ST(L)	1400 EXW4ST(L)	1500 EXW4ST(L)	1600 EXW4ST(L)	1680 EXW4ST(L)	1800 EXW4ST(L)	1900 EXW4ST(L)	2000 EXW4ST(L)	
	Model																												
Compound Gauge for Generator -0.1MPa~-0.2MPa	022W13350-002	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	—																												
Vacuum Gauge for Purge Line -0.1MPa~0 MPa	022W13350-003	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	—																												
Vacuum Gauge for Purge Line -0.1MPa~0.15MPa	022W13350-005																												
	—																												
Note: For the vacuum gauge for the purge line,022W13350-005 replaces 022W13350-003.																													
Combined type Sight glass	392W71221-000	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	DN70																												
sight glass single type	026W50407-000																												
	DN52.5																												
Note: The two type sight glassed are welding type, Single type is specially used for Generator, need to confirm before replace,																													
Rubber Hose for Purge Line	022W13899-001																												
	—																												
Paint for Water Box A	013W03621-000																												
	—																												
Paint for Water Box B	013W03620-000																												
	—																												
Water box paint thinner	013W03481-000																												
	—																												
Surface paint (base)	013W04022-000																												
	—																												
Surface paint (cure)	013W04023-000																												
	—																												
Note: Surface paint: Munsell 4.65G 4.50/2.85. The standard ROL color code is not available. The factory can send the color standard panel, the paint company can make the surface paint according to this color standard panel.																													
Note:																													
Vacuum pump oil	028W17656-000																												
	ULVOIL R-7																												
LiBr Solution 320kg/ barre	011W01075-000																												
	55% 200L																												
LiBr solution 100kg/ barrel	011W01083-001																												
	55% 60L																												
Lithium molybdate solution	011W01077-000																												
	—																												

Table 16: Other parts

Description																												
Part name	Part number	30EXET(L)	40EXE T(L)	50EXE T(L)	65EXE T(L)	80EXET(L)	100EXET(L)	130EXET(L)	160EXET(L)	200EXET(L)	255EXET(L)	320EXET(L)	400EXET(L)	500EXET(L)	630 EXW2ST(L)	700 EXW2ST(L)	800 EXW2ST(L)	900 EXW2ST(L)	1000 EXW2ST(L)	1120 EXW4ST(L)	1250 EXW4ST(L)	1400 EXW4ST(L)	1500 EXW4ST(L)	1600 EXW4ST(L)	1680 EXW4ST(L)	1800 EXW4ST(L)	1900 EXW4ST(L)	2000 EXW4ST(L)
	Model																											
Lithium Nitrate Solution	011W01076-000																											
	—																											
Octyl Alcohol	011W01070-000																											
	—																											
 Note: Because export from China is forbidden, contact Johnson Controls if you need vacuum pump oil, lithium molybdate, lithium nitrate and octyl alcohol.																												

Figure 49: Compound gauge for generator



LD31561

Figure 50: Compound gauge for purge line



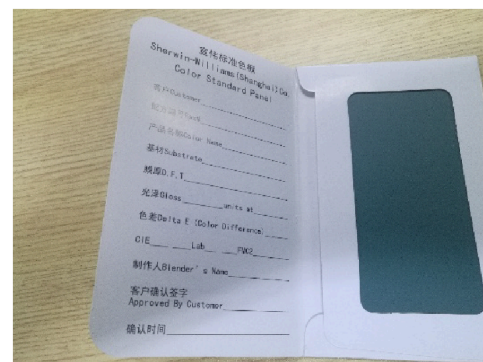
LD32013

Figure 51: Rubber hose for purge line



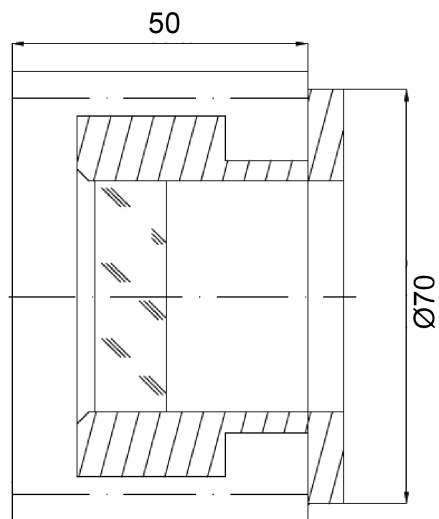
LD29569

Figure 52: Color standard panel



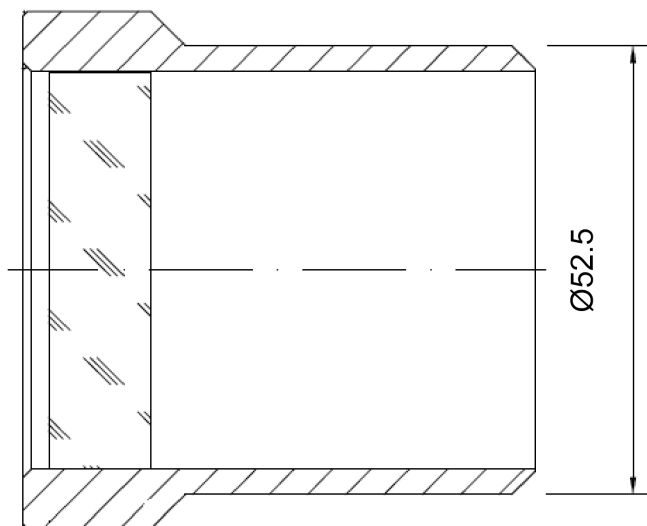
LD31318

Figure 53: Combined sight glass



LD33119

Figure 54: Single type sight glass



LD33120

Standard parts kit and tools kit

Table 17: Tools kit

Name	Part number	Part list	Model	Unit	Qty.
Tools kit	393W21036-000	PP measuring cylinder	(B class) -250ML 650941	Pcs	2
		Glass thermometer	H441 range 5°C (41°F) to 135°C (275°F)	Pcs	2
		Glass thermometer	E520R 0°C (32°F) to 80°C (176°F)	Pcs	2
		Density meter	14 pcs package	set	1
		Allen-key	8mm, 20	Pcs	1
		Spanner	8#	Pcs	1
		Sampler	250ML	Pcs	1
		Sampling joint for sampling valve		Pcs	1
		Sampling joint for purge line		Pcs	1
		Sampling hose	ID8mm OD18 L=1500	Pcs	2
		Suitcase for tools kit		Pcs	1

Figure 55: Tools kit



LD31319

Table 18: Parts kit

Name	Part number	Part list	Part model	Unit	Qty.
Parts kit	393W21037-000	Thermocouple	FST600-102K with thermowell, joint and 12 m cable	Pcs	1
		Resistance temperature sensor	FST600-103X with thermowell, joint and 12 m cable	Pcs	1
		Pressure sensor	FST800-501A	Pcs	1
		Cable with connector for pressure sensor	L= 2 m	Pcs	1
		Differential pressure switch	WFS10	Pcs	1
		O-Ring gasket of sampling valve	P-21 (extract side)	Pcs	10
		O-Ring for djusting valve (15A-40A)	P-16 (operate side)	Pcs	10
		Diaphragm gasket for purging vae	Haimen valve	Pcs	1
		Vacuum pump belt		Pcs	1
		Suitcase for parts kit		Pcs	1

Figure 56: Parts kit

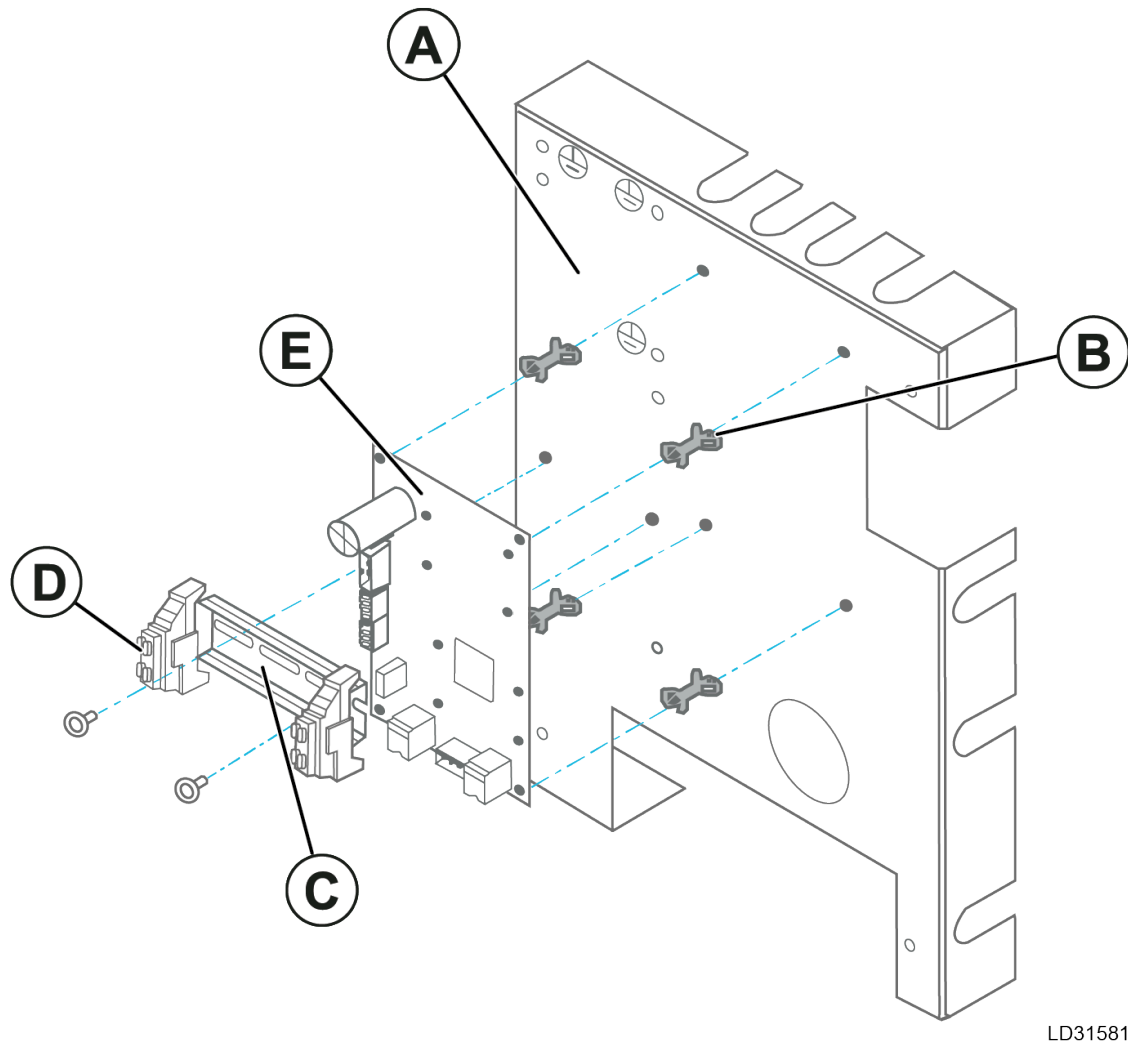


LD31320

- ① **Note:** This parts manual is only for the standard chiller. It does not apply to specially designed chillers such as the explosion-proof type chiller. The parts manual does not include the tube part numbers for different chiller models. If you need the part number for a specially designed chiller, or for the tubes or other parts which are not included in the part manual, inform the PTS department, who will provide you with the part number.

SC-EQ board installation kit

Figure 57: SC-EQ installation kits



Callout	Component part number	Component part name
A	—	PLC cover
B	025W43782-023	PCB support
C	025W43770-915	Rail
D	025W42501-040	End stop
E	031-03610-000	SC-EQ board

Figure 58: Rail

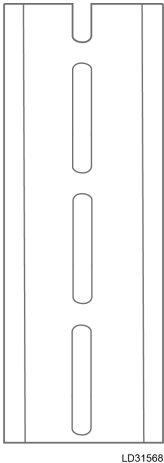


Figure 59: PCB support

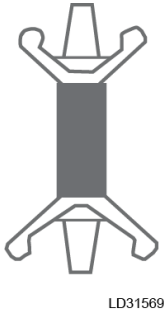


Figure 60: End stop

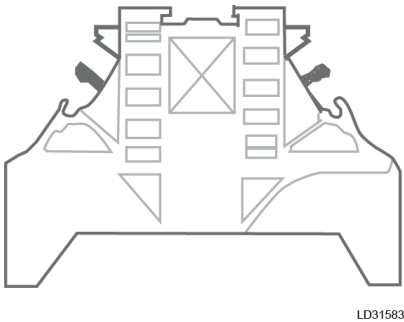


Figure 61: Screw

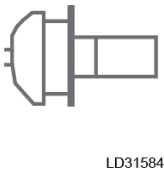


Figure 62: Harness SC-EQ

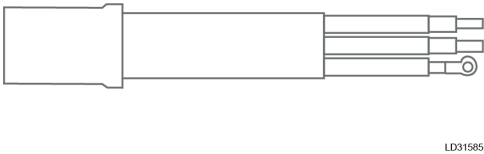


Figure 63: SC-EQ board

