

technical data



Applied Systems

Air-cooled
EWYQ080-250DAYN

R-410A



Air-cooled EWYQ080-250DAYN



In all of us,
a green heart

Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intension to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

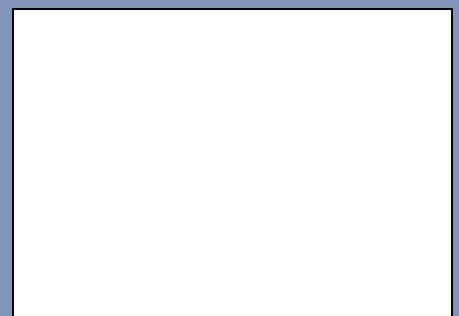


Daikin units comply with the European regulations that guarantee the safety of the product.



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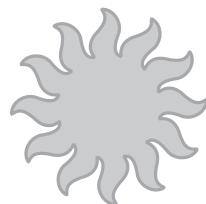
R-410A



Cooling only



Heating only



Heat pump



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EWYQ-DAYN

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1 Features

- Wide capacity range: 80 to 250kW with 8 heat pump models
- R-410A refrigerant
- Multiple refrigerant circuits and multiple compressors per circuit
- Reliable and efficient scroll with high EER values
- Good part load efficiency (seasonal EER)
- Anti-corrosion treated aluminium coils
- Low operating noise levels
- Easy 'plug and play' installation
- Unit dimensions allow easy transport
- Fans protected against abnormal operation (4 - 8 fans depending on unit size)
- Safety valves in each circuit
- Electronic circuit breakers
- Electronic expansion valve
- True dual plate brazed plate heat exchanger
- Sight glass
- All hydraulics can be accessed easily from 3 sides (no surrounding cabinet)
- Separate switchbox for easy access
- Compressors and controls at side of unit
- Increased reliability via 2 independent refrigerant circuits
- Double circuit heat exchanger (from >100 kW)
- Non hermetic filter/dryer
- New Daikin controller (Pcaso) with user friendly and powerful LCD interface



2 Specifications text

EWYQ080-250DAYN

Unit construction

Compact, modular and weatherproof design air-cooled chiller for outdoor installation - manufactured according to the ISO 9001 quality standard.

The ready-to-connect range has been designed for both air conditioning and process cooling applications and meets PED conformity. The use of state-of-the-art technologies and high quality materials ensures efficiency, reliability and an extended service life.

Each chiller is subjected to a function test and test run in the factory allowing for standard requirements.

Casing / Colour

Painted, galvanised steel plate. Fully factory assembled on a base frame. Colour ivory white.

Number of refrigerant circuits

Size 080-100 single circuit, 130-250 double circuit.

Each refrigerant circuit has its own fully independent design thereby guaranteeing a high level of system reliability.

Compressor

Hermetically sealed scroll type compressor with low level of vibration.

Condenser

Condensation register with continuous running and surface-corrugated aluminium flaps. The seamless copper pipes are permanently connected with the flaps by means of mechanical flaring. The refrigerant subcooler to improve performance is an integral part of each refrigerant circuit with a liquid stopper between the condenser and subcooler circuit. An epoxy resin coating permanently protects the flaps from corrosion thereby extending the field of application of this device.

Fans

Low-noise axial fans complete with outlet protective grating, directly driven, statically and dynamically balanced, weatherproof drive motors for outdoor operation and maintenance-free bearings. Motor safety class IP 55. Winter starting device for operating the machine down to minimum exterior temperatures of 0°C as standard. Optional inverter fans controlled on high pressure allow ambient operation down to -10°C.

Evaporator

R410a optimised DX counter flow plate heat exchanger made of stainless steel, plates brazed gastight with copper, for water and glycol mixtures. As from module size 130 twin circuit design (two refrigerant circuits / one water circuit). A special refrigerant distribution system has been incorporated into the plate duct for optimal capacity of the complete heat transmission surface. As well as an additional increase in efficiency, this is also responsible for stable control behaviour in the heat exchanger. The plate heat exchanger is heat-insulated to ensure it is diffusion-proof to prevent any heat loss.

Piping

Refrigerant connecting conduits made of Cu pipe with the required cooling fixtures such as shut-off and filler valves, filter-driers, solenoid valve and expansion valve. Suction line including insulation. Refrigerant circuit is subjected to a pressure and leak test in the factory, is dried, evacuated and supplied with refrigerant and filled with oil ready for operation.

Hydraulic module

To be able to cover a larger range of applications, the EWYQ060-250DAYN range can be supplied with or without integrated hydraulic components. The basic unit already contains the flow switch and water filter. The optional hydraulic module includes all components needed for operation as well as a circulation pump, expansion vessel, manometer,

2 Specifications text

shut-off valves, safety valve, purge, filling and drainage valve, maintenance connections and regulation valve. Furthermore the chiller can be expanded with a 200l buffer tank within the chassis.

1
2

Switching and control device

Weatherproof design factory-wired control cabinet, safety class IP54, assembled externally on the machine chassis, with all the components required for automatic operation consisting specifically of the following:

Main switch, phase-sequence relay, transformer (400/230V), compressor start-up protective devices with fuse and heat overload cut-out for the fans, control voltage fuse, designated terminal strip for external connections.

PCAS0 digital microprocessor for controlling the cold water flow temperature using PID control behaviour without continuous control deviation with the following sensors:

- Temperature sensor in the cold water flow and return
- Temperature sensor for evaporation and condensation temperature
- Low- and high-pressure switch

The controller has the following functions to prevent safety shut-downs:
Load limiting controller for low evaporation and high condensation temperature to prevent overloading the compressor motor and high- and low-pressure faults.
Self-adjusting start-up frequency limiting with automated equalisation of compressor hours and operating hours.

All of the operating and status data can be read on the LC display and the set points can be set. In particular, these are:

- Cold water set point
- Cold water outlet temperature
- Air temperature
- Operating hours and start of each compressor
- the last 40 error messages complete with date and time
- Evaporation and condensation temperature for each refrigerant circuit

As standard, the machine has communication facilities with higher level master systems in which case the following contacts are executed or can be executed:
Inputs:

- Sliding movement of set points
- Remote On/Off
- External alarm acknowledgement

Outputs:

- Collection fault message circuit 1
- Collection fault message circuit 2
- Control of third party free cooler

DICN can be offered as optional extra to sequence upto 4 units, offering accurate control of a common setpoint temperature, pump management and balanced compressor run hours.

Modbus is the standard communication protocol for BMS. As an option a gateway allows Lonworks or Bacnet communication. Daikin DIII net offers further communication possibilities with Daikin D-Bacs systems such as I-Manager and I-Touch controller.

3 Specifications

3-1 TECHNICAL SPECIFICATIONS				EWYQ080DA YN	EWYQ100DA YN	EWYQ130DA YN	EWYQ150DA YN	EWYQ180DA YN	EWYQ210DA YN	EWYQ230DA YN	EWYQ250DA YN	
Capacity (Eurovent conditions specified in notes)	Cooling	Nominal	kW	77	100	136	145	183	211	234	252	
	Heating	Nominal	kW	87.7	114	149	165	199	225	258	284	
Capacity Steps			%	0-50-100	0-50-100	0-25-50-75- 100	0-25-50-75- 100	21/29-43/ 50/57-71/ 79-100	0-25-50-75- 100	22/28-44/ 50/56-72/ 78-100	0-25-50-75- 100	
Nominal input (Eurovent conditions specified in notes)	Cooling		kW	26.5	36.2	47.6	55.7	63.8	75.3	82.2	94.0	
	Heating		kW	30.0	38.1	49.6	58.8	68.0	77.0	86.9	97.9	
EER				2.91	2.76	2.86	2.60	2.87	2.80	2.85	2.68	
COP (Eurovent conditions specified in notes)				2.92	2.99	3.00	2.81	2.93	2.92	2.97	2.90	
ESEER				4.00	3.81	4.31	4.07	4.33	4.23	4.20	4.00	
Casing	Colour			Ivory white/Munsell code 5Y7.5/1								
	Material			Polyester painted galvanised steel plate								
Dimensions	Unit	Height	mm	2311	2311	2311	2311	2311	2311	2311	2311	
		Width	mm	2000	2000	2000	2000	2000	2000	2000	2000	
		Depth	mm	2566	2566	2631	2631	3081	3081	4850	4850	
Weight	Unit		kg	1400	1450	1550	1600	1850	1900	3200	3300	
	Operating Weight		kg	1415	1465	1567	1619	1875	1927	3239	3342	
	Gross weight		kg	1450	1500	1600	1650	1900	1950	3250	3350	
Water Heat Exchanger	Type			Brased plate								
	Filter	Type			STRAINER GALVANIZED							
		Diameter perforations	mm		1	1	1	1	1	1	1	1
	Minimum water volume in the system			l	393	511	334	370	446	504	560	616
	Water flow rate	Min	l/min		110	143	195	208	262	302	330	358
		Max	l/min		503	654	854	946	1141	1290	1433	1571
Nominal Water Flow	Cooling	l/min		221	287	390	416	525	605	659	717	
	Heating	l/min		251	327	427	473	570	645	717	788	
Nominal Water Flow	Cooling	Total	kPa	36	36	43	38	41	44	38	37	
Water Heat Exchanger	Insulation material			Foamed synthetic elastomer								
	Model	Quantity			1	1	1	1	1	1	1	
		Model			PT120	PT120	DV47HP	DV47HP	DV58HP	DV58HP	DV58HP	DV58HP
Air heat exchanger	Type			Cross fin coil / Hi-Xss tubes and PE coated								
	Rows			2	2	3	3	3	3	3	3	
	Stages			56	56	48	56	56	56	48	48	
	Fin Pitch			mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Face Area			m ²	2.46	2.46	2.11	2.46	3.02	3.02	2.11	2.11
	No. of coils				4	4	4	4	4	4	8	8
Hydraulic components	Unit water volume		l	15	15	17	19	25	27	39	42	
	Nominal water pressure drop unit		kPa	42	43	55	51	61	70	68	74	
Fan	Drive			Direct drive								
	Nominal air flow		m ³ /min	780	780	800	860	1290	1290	1600	1600	
	Model	Quantity			4	4	4	4	6	6	8	8
		Speed	rpm		880	880	900	970	970	970	900	900
	Motor Output		W		500	500	600	1000	1000	1000	600	600
	Discharge direction			Vertical								

3 Specifications

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3

3-1 TECHNICAL SPECIFICATIONS			EWYQ080DA YN	EWYQ100DA YN	EWYQ130DA YN	EWYQ150DA YN	EWYQ180DA YN	EWYQ210DA YN	EWYQ230DA YN	EWYQ250DA YN	
Compressor	Type		Scroll compressor								
	Refrigerant oil type		Daphne FVC68D								
	Refrigerant oil charge	l	6.7	6.7	3.3	6.7	6.7	6.7	6.7	6.7	
	Model	Quantity		2	2	4	4	2	4	2	4
		Model		SJ180	SJ240	SJ161	SJ180	SJ180	SJ240	SJ240	SJ300
		Speed	rpm	2900	2900	2900	2900	2900	2900	2900	2900
		Quantity						2		2	
		Model						SJ240		SJ300	
Speed		rpm					2900		2900		
Sound Level	Sound Power	Cooling	dBA	86	86	88	89	90	90	91	91
Refrigerant circuit	Refrigerant type		R-410A								
	Refrigerant charge	kg	33	37	22	22	32	32	39	39	
		kg			22	22	32	32	39	39	
	No of circuits		1	1	2	2	2	2	2	2	
Refrigerant control		Electronic expansion valve									
Piping connections	Water heat exchanger inlet / outlet		3"OD	3"OD	3"OD	3"OD	3"OD	3"OD	3"	3"	
	Water heat exchanger drain		1/2"G								
Safety Devices			High pressure (pressure switch)								
			Pressure relief valve								
			Low pressure safety	Low pressure safety	Low pressure safety	Low pressure safety	Low pressure protection	Low pressure protection	Low pressure safety	Low pressure safety	
			Freeze up protection								
			Flowswitch								
			Discharge temperature protector								
			Reverse phase protector								
			Electronic protection module compressors	Electronic protection module compressors	Electronic protection module compressors (only for SJ180 SJ240)	Electronic protection module compressors (only for SJ180 SJ240)	Electronic protection module compressors (only for SJ180 SJ240)	Electronic protection module compressors (only for SJ180 SJ240)	Electronic protection module compressors	Electronic protection module compressors	
			Overcurrent relays for compressors and fans								
			Notes			Nominal cooling capacity at Eurovent conditions: Evaporator 12xC/7xC; ambient 35xC					
Nominal cooling power input at Eurovent conditions: Evaporator 12xC/7xC; ambient 35xC (=Power input compressors + fans + electrical circuit)											
Minimum required watervolume for standard thermostat settings and at nominal conditions											
Nominal heating capacity at Eurovent conditions: Evaporator 40xC/45xC, ambient: drybulb 7xC, wetbulb 6xC											
Nominal heating power input at Eurovent conditions: Evaporator 40xC/45xC, ambient: drybulb 7xC, wetbulb 6xC (= Power input compressors+fans+electrical circuit)											

3-2 ELECTRICAL SPECIFICATIONS			EWYQ080DA YN	EWYQ100DA YN	EWYQ130DA YN	EWYQ150DA YN	EWYQ180DA YN	EWYQ210DA YN	EWYQ230DA YN	EWYQ250DA YN	
Power Supply	Phase		3~								
	Frequency	Hz	50	50	50	50	50	50	50	50	
	Voltage		V	400	400	400	400	400	400	400	400
	Voltage Tolerance	Minimum	%	-10%							
		Maximum	%	+10%							
Unit	Starting Current		A	201 (max. 240)	221 (max. 272)	161 (max. 269)	199 (max. 320)	221 (max. 357)	221 (max. 368)	266 (max. 440)	266 (max. 468)
	Zmax	list	No requirements								
	Nominal Running Current Cooling	A	60	72	88	113	131	144	162	181	
	Maximum Running Current	A	96	120	160	177	209	233	262	290	
	Recommended fuses according to IEC standard 269-2			3x125gL	3x160gL	3x200gL	3x200gL	3x250gL	3x250gL	3x300gL	3x355gL
Fan	Starting Method		Direct On-Line								
	Maximum Running Current	A	1.5	1.5	1.4	2.1	2.1	2.1	1.6	1.6	

3 Specifications

3-2 ELECTRICAL SPECIFICATIONS			EWYQ080DAYN	EWYQ100DAYN	EWYQ130DAYN	EWYQ150DAYN	EWYQ180DAYN	EWYQ210DAYN	EWYQ230DAYN	EWYQ250DAYN
Compressor	Starting current	A	195	215	158	195	195/215	215	215/260	260
	Nominal running current (RLA)	A	25/25	31/31	19/19	25/25	25/31	31/31	31/40	40/40
	Maximum Running Current	A	39	51	35	39	39/51	51	51/65	65
	Starting Method	Direct on line								
Control Circuit	Phase	1~								
	Frequency	Hz	50	50	50	50	50	50	50	50
	Voltage	V	230V (supplied by factory installed transformer s)	230V (supplied by factory installed transformer s)	230V (supplied by factory installed transformer s)	230V (supplied by factory installed transformer s)			230V/24V AC (supplied by factory installed transformer s)	230V/24V AC (supplied by factory installed transformer s)
	Crankcase heater (E1/2HC)	W	2x75	2x75	4x65	4x75	4x75	4x75	4x75	4x75
Notes			Initial starting current = Maximum running current 4 fans (1 circuit) + starting current 1 compressor	Initial starting current = Maximum running current 4 fans (1 circuit) + starting current 1 compressor	Starting current of the unit = Maximum running current 2 fans (1 circuit) + starting current 1 compressor	Starting current of the unit = Maximum running current 2 fans (1 circuit) + starting current 1 compressor	Initial starting current = Maximum running current 3 fans (1 circuit) + starting current 1 compressor	Initial starting current = Maximum running current 3 fans (1 circuit) + starting current 1 compressor	Initial starting current = Maximum running current 4 fans (1 circuit) + starting current 1 compressor	Initial starting current = Maximum running current 4 fans (1 circuit) + starting current 1 compressor
			Max. starting current of the unit = Maximum running current 4 fans + max. running current 3 compressors + starting current 1 compressor	Max. starting current of the unit = Maximum running current 4 fans + max. running current 3 compressors + starting current 1 compressor	Max. starting current of the unit = Maximum running current 4 fans + max. running current 3 compressors + starting current 1 compressor	Max. starting current of the unit = Maximum running current 4 fans + max. running current 3 compressors + starting current 1 compressor	Maximum starting current = maximum running current 6 fans + maximum running current 3 compressors + starting current 1 compressor	Maximum starting current = maximum running current 6 fans + maximum running current 3 compressors + starting current 1 compressor	Maximum starting current = maximum running current 8 fans + maximum running current 3 compressors + starting current 1 compressor	Maximum starting current = maximum running current 8 fans + maximum running current 3 compressors + starting current 1 compressor

3 Specifications

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EWYQ080-100DAYN

Technical specifications options

OPSP

Units			EWYQ080DAYN*	EWYQ100DAYN*
WEIGHT	Additional machine weight	kg	250	250
	Additional operation weight	kg	268	268
	Additional gross weight	kg	250	250
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP50-240/2	TP50-240/2
	Nominal Static Height Unit cooling	kPa	173	154
HYDRAULIC COMPONENTS	Additional unit water volume	l	18	18
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3

OPSP + OPBT

Units			EWYQ080DAYN*	EWYQ100DAYN*
WEIGHT	Additional machine weight	kg	300	300
	Additional operation weight	kg	508	508
	Additional gross weight	kg	300	300
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP50-240/2	TP50-240/2
	Nominal Static Height Unit cooling	kPa	173	154
HYDRAULIC COMPONENTS	Buffertank	l	190	190
	Additional unit water volume	l	208	208
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3

OPHP

Units			EWYQ080DAYN*	EWYQ100DAYN*
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP50-430/2	TP50-340/2
	Nominal Static Height Unit	kPa	365	348

3TW57651-1A

EWYQ080-100DAYN

Electrical specifications options

OPSP

Units			EWYQ080DAYN*	EWYQ100DAYN*
STD PUMP	Starting method		Direct On-Line	
	Power	kW	2,2	2,2
	Maximum running current	A	4,45	4,45
	Starting current	A	42	42

OPHP

Units			EWYQ080DAYN*	EWYQ100DAYN*
HIGH ESP PUMP	Starting method		Direct On-Line	
	Power	W	5,5	5,5
	Maximum running current	A	11,2	11,2
	Starting current	A	131	131

OP10

Units			EWYQ080DAYN*	EWYQ100DAYN*
HEATER TAPE	Supply Voltage	V	230+/-10%	
	Recommended fuses	A	2 x 10A	
	Power standard model		1 x 300 W	1 x 300 W
	Power model with pump		2 x 300 W	2 x 300 W
	Power model with pump and OPBT		2 x 300 W + 1 x 150 W	2 x 300 W + 1 x 150 W

3TW57651-1A

NOTES

- 1 Initial starting current=Maximum running current 4 fans (1 circuit) + starting current 1 compressor
- 2 Maximum starting current=Maximum running current 8 fans+Maximum running current 3 compressors+Starting current 1 compressor

3 Specifications

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3

EWYQ130-150DAYN				
Technical specifications options				
OPSP				
Units		EWYQ130DAYN*		EWYQ150DAYN*
WEIGHT	Additional machine weight	kg	250	250
	Additional operation weight	kg	286	286
	Additional gross weight	kg	250	250
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-260/2		TP65-260/2
	Nominal Static Height Unit cooling	kPa	141	141
HYDRAULIC COMPONENTS	Additional unit water volume	l	36	36
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPSP + OPBT				
Units		EWYQ130DAYN*		EWYQ150DAYN*
WEIGHT	Additional machine weight	kg	300	300
	Additional operation weight	kg	526	526
	Additional gross weight	kg	300	300
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-260/2		TP65-260/2
	Nominal Static Height Unit cooling	kPa	141	141
HYDRAULIC COMPONENTS	Buffertank	l	190	190
	Additional unit water volume	l	226	226
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPHP				
Units		EWYQ130DAYN*		EWYQ150DAYN*
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-340/2		TP65-340/2
	Nominal Static Height Unit	kPa	261	261

3TW57671-1B

EWYQ130-150DAYN				
Electrical specifications options				
OPSP				
Units		EWYQ130DAYN*		EWYQ150DAYN*
STD PUMP	Starting method	Direct On-Line		
	Power	kW	3kW	3kW
	Maximum running current	A	6,3	6,3
	Starting current	A	58	58
OPHP				
Units		EWYQ130DAYN*		EWYQ150DAYN*
HIGH ESP PUMP	Starting method	Direct On-Line		
	Power	W	5,5kW	5,5kW
	Maximum running current	A	11,2	11,2
	Starting current	A	131	131
OP10				
Units		EWYQ130DAYN*		EWYQ150DAYN*
HEATER TAPE	Supply Voltage	V	230+/-10%	
	Recommended fuses	A	2 x 10A	
	Power standard model		1 x 300 W	1 x 300 W
	Power model with pump		2 x 300 W	2 x 300 W
	Power model with pump and OPBT		2 x 300 W + 1 x 150 W	2 x 300 W + 1 x 150 W

3TW57671-1B

NOTES

- 1 Initial starting current=Maximum running current 4 fans (1 circuit) + starting current 1 compressor
- 2 Maximum starting current=Maximum running current 8 fans+Maximum running current 3 compressors+Starting current 1 compressor

3 Specifications

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3

EWYQ180-210DAYN

Technical specifications options				
OPSP				
Units		EWYQ180DAYN*		EWYQ210DAYN*
WEIGHT	Additional machine weight	kg	250	250
	Additional operation weight	kg	286	286
	Additional gross weight	kg	250	250
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-260/2		TP65-260/2
	Nominal Static Height Unit cooling	kPa	152	128
HYDRAULIC COMPONENTS	Additional unit water volume	l	36	36
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPSP + OPBT				
Units		EWYQ180DAYN*		EWYQ210DAYN*
WEIGHT	Additional machine weight	kg	300	300
	Additional operation weight	kg	526	526
	Additional gross weight	kg	300	300
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-260/2		TP65-260/2
	Nominal Static Height Unit cooling	kPa	152	128
HYDRAULIC COMPONENTS	Buffertank	l	190	190
	Additional unit water volume	l	226	226
	Expansion vessel	l		35
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPHP				
Units		EWYQ180DAYN*		EWYQ210DAYN*
PUMP	Type	Single-stage-in-line-pumps		Single-stage-in-line-pumps
	Quantity	1		1
	Model	TP65-410/2		TP65-410/2
	Nominal Static Height Unit	kPa	306	286

3TW57691-1B

EWYQ180-210DAYN

Electrical specifications options				
OPSP				
Units		EWYQ180DAYN*		EWYQ210DAYN*
STD PUMP	Starting method	Direct On-Line		
	Power	kW	4kW	4kW
	Maximum running current	A	8	8
	Starting current	A	98	98
OPHP				
Units		EWYQ180DAYN*		EWYQ210DAYN*
HIGH ESP PUMP	Starting method	Direct On-Line		
	Power	W	7,5kW	7,5kW
	Maximum running current	A	15,2	15,2
	Starting current	A	169	169
OP10				
Units		EWYQ180DAYN*		EWYQ210DAYN*
HEATER TAPE	Supply Voltage	V	230+/-10%	
	Recommended fuses	A	2 x 10A	
	Power standard model		1 x 300 W	1 x 300 W
	Power model with pump		2 x 300 W	2 x 300 W
Power model with pump and OPBT		2 x 300 W + 1 x 150 W	2 x 300 W + 1 x 150 W	

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NOTES

- 1 Initial starting current=Maximum running current 4 fans (1 circuit) + starting current 1 compressor
- 2 Maximum starting current=Maximum running current 8 fans+Maximum running current 3 compressors+Starting current 1 compressor

3 Specifications

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3

EWYQ230-250DAYN				
Technical specifications options				
OPSP				
Units			EWYQ230DAYN*	EWYQ250DAYN*
WEIGHT	Additional machine weight	kg	250	250
	Additional operation weight	kg	271	271
	Additional gross weight	kg	250	250
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP65-260/2	TP65-260/2
	Nominal Static Height Unit cooling	kPa	143	129
HYDRAULIC COMPONENTS	Additional unit water volume	l	21	21
	Expansion vessel	l		50
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPSP + OPBT				
Units			EWYQ230DAYN*	EWYQ250DAYN*
WEIGHT	Additional machine weight	kg	300	300
	Additional operation weight	kg	511	511
	Additional gross weight	kg	300	300
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP65-260/2	TP65-260/2
	Nominal Static Height Unit cooling	kPa	143	129
HYDRAULIC COMPONENTS	Buffertank	l	190	190
	Additional unit water volume	l	211	211
	Expansion vessel	l		50
	Pre-charge pressure exp. vessel	bar		1,5
	Safety valve	bar		3
OPHP				
Units			EWYQ230DAYN*	EWYQ250DAYN*
PUMP	Type		Single-stage-in-line-pumps	Single-stage-in-line-pumps
	Quantity		1	1
	Model		TP65-410/2	TP65-410/2
	Nominal Static Height Unit	kPa	304	292

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EWYQ230-250DAYN				
Electrical specifications options				
OPSP				
Units			EWYQ230DAYN*	EWYQ250DAYN*
STD PUMP	Starting method		Direct On-Line	
	Power	kW	4,0	4,0
	Maximum running current	A	8,0	8,0
	Starting current	A	98	98
OPHP				
Units			EWYQ230DAYN*	EWYQ250DAYN*
HIGH ESP PUMP	Starting method		Direct On-Line	
	Power	kW	7,5	7,5
	Maximum running current	A	15,2	15,2
	Starting current	A	169	169
OP10				
Units			EWYQ230DAYN*	EWYQ250DAYN*
HEATER TAPE	Supply Voltage	V	230+/-10%	
	Recommended fuses	A	2 x 10A	
	Power standard model		1 x 300 W	1 x 300 W
	Power model with pump		2 x 300 W	2 x 300 W
	Power model with pump and OPBT		2 x 300 W + 1 x 150 W	2 x 300 W + 1 x 150 W

3TW57711-1A

NOTES

- 1 Initial starting current=Maximum running current 4 fans (1 circuit) + starting current 1 compressor
- 2 Maximum starting current=Maximum running current 8 fans+Maximum running current 3 compressors+Starting current 1 compressor

4 Options

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4

EWYQ-DAYN(N-P-B)

Optional equipment for EWYQ-DAYNN

Capacity: 080-250 kW

EWYQ080DAYNN	EWYQ150DAYNN	EWYQ230DAYNN
EWYQ100DAYNN	EWYQ180DAYNN	EWYQ250DAYNN
EWYQ130DAYNN	EWYQ210DAYNN	

Option number	Option description	Unit size								Availability
		080	100	130	150	180	210	230	250	
	Standard unit	°	°	°	°	°	°	°	°	
OPSC	Single pump contactor	°	°	°	°	°	°	°	°	fact. mount.
OPTC	Twin pump contactor	°	°	°	°	°	°	°	°	fact. mount.
OPSP	Single pump	°	°	°	°	°	°	°	°	fact. mount.
OPTP	Twin pump (1 pump house, dual motor)	°	°	°	°	°	°	°	°	fact. mount.
OPHP	High ESP pump (single pump only)	°	°	°	°	°	°	°	°	fact. mount.
OPBT	Buffer tank	°	°	°	°	°	°	°	°	fact. mount.
OPIF	Inverter fans (For low ambient -15°C)	°	°	°	°	°	°	°	°	fact. mount.
OPZL	Glycol 0°C / -10°C	°	°	°	°	°	°	°	°	fact. mount.
OP03	Dual pressure relief valve	°	°	°	°	°	°	°	°	fact. mount.
OP10	Evaporator heater tape	°	°	°	°	°	°	°	°	fact. mount.
OP12	Option valves (discharge-, liquid line- and suction stop valve)	°(S)	°(S)	°(S)	°(S)	°(S)	°(S)	°(S)	°(S)	fact. mount.
OP57	A-meter / V-meter	°	°	°	°	°	°	°	°	fact. mount.
OPLN	Low noise = OPIF + Compressor housing	°	°	°	°	°	°	°	°	fact. mount.
OPCG	Condenser protection grills	°	°	°	°	°	°	°	°	fact. mount.
	Available kits									
EKLONPG	Gateway for LON	°	°	°	°	°	°	°	°	Kit
EKBNPG	Gateway for BACNET	°	°	°	°	°	°	°	°	Kit
EKACPG	Adress card	°	°	°	°	°	°	°	°	Kit
EKRUPG	Remote user interface	°	°	°	°	°	°	°	°	Kit

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NOTES

- ° Available
- Not available
- (S) Option required for Swedish national law SNFS 1992:16

5 Capacity tables

5 - 1 Cooling capacity tables

EWYQ080-250DAYN(N-P-B)

Cooling

Tamb (°C)		20		25		30		35		40		43	
LWE	Size	CC	PI	CC	PI	CC	PI	CC	PI	CC	PI	CC	PI
5	080	83,1	20,4	79,5	22,1	75,7	24,1	71,7	26,2	64,8	28,7	59,5	30,3
	100	109	26,8	104	29,4	99,2	32,4	93,6	35,8	84,0	39,5	76,9	42,0
	130	148	35,6	142	39,0	135	42,7	127	46,8	117	51,5	109	54,6
	150	161	42,0	154	45,9	145	50,2	137	55,2	125	60,7	117	64,4
	180	199	48,3	190	52,7	181	57,6	171	63,1	159	70,0	151	74,9
	210	234	56,6	223	61,8	211	67,7	198	74,3	183	82,5	173	88,3
	230	254	62,2	243	67,9	232	74,2	219	81,3	197	89,3	180	94,5
	250	274	71,8	262	78,1	250	85,1	236	92,9	212	102	194	107
7	080	89,1	20,5	85,2	22,3	81,2	24,3	77,0	26,5	69,5	28,9	63,9	30,5
	100	117	27,2	112	29,9	106	32,9	100	36,2	89,8	40,0	82,3	42,5
	130	159	36,3	152	39,8	144	43,5	136	47,6	124	52,3	116	55,4
	150	170	42,5	162	46,4	154	50,8	145	55,7	132	61,3	124	65,0
	180	213	49,0	203	53,6	194	58,3	183	63,8	170	70,7	161	75,6
	210	248	57,6	236	62,8	224	68,7	211	75,3	195	83,5	184	89,4
	230	271	63,0	260	68,7	247	75,1	234	82,2	210	90,2	193	95,4
	250	292	72,7	280	79,1	267	86,2	252	94,0	226	103	207	108
10	080	98,6	20,9	94,5	22,6	90,1	24,6	85,4	26,8	77,1	29,3	70,9	30,9
	100	129	28,0	123	30,6	117	33,6	110	37,0	99,0	40,8	90,7	43,2
	130	175	37,5	167	40,9	159	44,7	150	48,9	137	53,5	128	56,7
	150	185	43,3	177	47,3	168	51,8	158	56,8	144	62,4	135	66,1
	180	235	50,2	224	54,5	214	59,5	202	65,0	188	71,9	178	76,8
	210	271	59,2	258	64,4	245	70,3	231	76,9	213	85,2	201	91,1
	230	299	64,4	286	70,2	272	76,6	257	83,7	231	91,7	212	97,0
	250	322	74,3	308	80,8	293	87,9	277	95,9	249	105	227	110
13	080	109	21,2	104	23,0	100	25,0	94,4	27,2	85,2	29,7	78,4	31,3
	100	142	28,8	135	31,4	128	34,4	121	37,8	109	41,6	100	44,1
	130	192	38,7	184	42,2	174	46,0	164	50,2	150	54,9	140	58,0
	150	203	44,4	193	48,5	184	53,0	173	58,1	158	63,7	147	67,4
	180	258	51,4	247	55,8	235	60,8	222	66,3	206	73,3	195	78,2
	210	296	61,0	282	66,2	267	72,1	251	78,7	232	87,0	219	92,9
	230	328	66,0	314	71,7	299	78,2	283	85,4	254	93,4	233	98,7
	250	353	76,1	338	82,6	322	89,8	304	97,8	273	107	249	112
16	080	120	21,5	115	23,4	110	25,4	104	27,7	93,8	30,2	86,3	31,8
	100	155	29,7	148	32,3	141	35,3	133	38,7	119	42,5	109	45,0
	130	210	40,0	201	43,5	191	47,4	179	51,6	164	56,3	153	59,4
	150	222	45,7	212	49,8	201	54,4	189	59,6	173	65,2	161	69,0
	180	283	52,9	270	57,3	257	62,2	243	67,8	226	74,8	214	79,7
	210	321	63,0	306	68,2	290	74,0	273	80,6	252	89,0	238	94,9
	230	360	67,8	344	73,5	327	79,9	309	87,2	278	95,2	255	100
	250	387	78,0	370	84,6	352	91,9	332	99,9	298	109	273	115
20	080	136	22,1	130	24,0	124	26,0	118	28,3	106	30,9	93,4	15,1
	100	174	31,1	166	33,7	158	36,7	149	40,0	133	43,8	119	21,5
	130	236	41,8	225	45,4	213	49,3	201	53,6	183	58,4	167	28,5
	150	252	47,6	240	51,9	227	56,7	213	61,9	194	67,7	177	33,2
	180	317	55,0	304	59,4	289	64,4	273	70,0	253	77,0	231	38,1
	210	357	66,0	341	71,1	323	77,0	304	83,6	280	91,9	261	45,4
	230	404	70,4	386	76,1	367	82,6	347	89,8	312	97,9	291	47,9
	250	435	80,8	415	87,5	395	94,9	372	103	333	112	312	54,7

Symbols:

- CC: Cooling capacity (kW)
- PI : Power input (kW)
- LWE: Leaving Water Evaporator temperature (°C)
- Tamb: Ambient temperature (°C)

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NOTES

- 1 Cooling capacity (CAP)**
Capacity is according to Eurovent rating standard 6/C/003-2006 and valid for chilled water range Dt = 3 - 8°C
- 2 Power input (kW)**
Power input is total input according to Eurovent rating standard 6/C/003-2006: Compressor + fans + control circuit
- 3 For units with integrated pump**
Values for CC are to be multiplied by 0,99 in order to compensate heat input of the pump

5 Capacity tables

5 - 2 Heating capacity tables

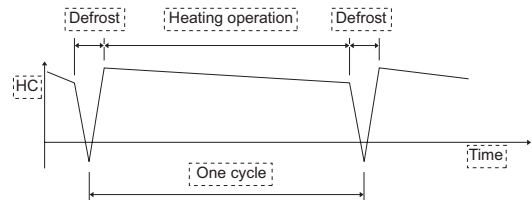
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EWYQ080-250DAYN(N-B-P)

HEATING

Tamb (°CDB)	Size	-10		-7		-4		0		4		7		10		15		21	
		HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI	HC	PI
25	080	58,4	19,8	64,5	20,0	70,5	20,1	78,0	20,3	86,0	20,6	92,4	20,9	99,0	21,1	110	21,6	125	22,2
	100	74,1	23,9	82,3	24,2	90,3	24,4	100	24,8	111	25,2	119	25,5	127	25,9	142	26,5	159	27,3
	130	97	31,7	108	32,2	118	32,7	131	33,4	145	34,1	156	34,7	167	35,3	186	36,3	210	37,4
	150	107	40,0	118	40,0	129	40,1	143	40,2	157	40,5	168	40,7	179	40,9	199	41,4	223	41,9
	180	129	44,1	144	44,5	158	44,9	176	45,5	194	46,2	208	46,7	222	47,3	246	48,3	273	49,5
	210	141	50,7	158	51,0	174	51,3	193	51,6	214	52,0	229	52,3	244	52,6	270	53,3	299	54,1
	230	168	55,8	187	56,4	205	57,0	227	57,8	250	58,7	268	59,3	287	60,0	319	61,1	358	62,6
250	186	63,2	206	64,1	226	64,8	250	65,9	275	66,9	295	67,7	315	68,5	350	69,9	391	71,5	
30	080	57,4	21,8	63,3	21,9	69,8	22,0	77,2	22,2	85,0	22,5	91,2	22,8	97,6	23,0	109	23,5	123	24,5
	100	73,2	26,4	81,2	26,7	89,8	27,0	99,5	27,4	110	27,8	118	28,2	126	28,5	140	29,1	157	30,0
	130	96	34,8	106	35,3	117	35,8	130	36,5	144	37,2	154	37,8	165	38,4	184	39,4	207	40,6
	150	106	44,1	117	44,0	129	44,0	142	44,1	156	44,3	167	44,5	178	44,7	197	45,1	221	45,7
	180	127	48,5	142	48,9	157	49,3	174	49,9	192	50,6	206	51,2	220	51,7	243	52,8	269	54,0
	210	140	55,8	157	56,2	174	56,5	193	56,8	213	57,2	228	57,5	243	57,8	268	58,3	296	59,1
	240	166	61,2	184	61,9	204	62,6	226	63,5	248	64,4	266	65,1	284	65,8	315	67,0	353	68,5
250	184	69,1	204	70,0	225	70,9	249	72,0	273	73,2	293	74,0	312	74,9	346	76,3	386	78,1	
35	080	56,6	24,0	62,4	24,1	68,7	24,2	76,5	24,4	84,1	24,7	90,0	24,9	96,3	25,2	107	25,7	121	26,4
	100	72,5	29,1	80,4	29,5	88,7	29,8	99,0	30,3	109	30,7	116	31,1	124	31,5	138	32,1	155	33,0
	130	95	38,4	105	38,8	116	39,3	129	39,9	142	40,7	153	41,2	163	41,8	181	42,9	204	44,1
	150	105	48,6	116	48,5	127	48,4	142	48,4	155	48,5	166	48,7	177	48,9	196	49,3	219	49,8
	180	126	53,3	140	53,7	155	54,2	173	54,9	190	55,6	204	56,1	217	56,7	239	57,8	265	59,1
	210	140	61,5	156	61,9	173	62,2	193	62,6	212	63,0	227	63,2	241	63,5	266	64,0	294	64,7
	240	165	67,3	182	68,1	201	68,8	224	69,8	246	70,8	263	71,5	281	72,3	311	73,6	348	75,2
250	182	75,7	202	76,7	222	77,6	247	78,9	271	80,1	290	81,1	309	82,0	341	83,6	381	85,5	
40	080	56,2	26,5	61,7	26,5	67,7	26,6	75,9	26,8	83,2	27,1	88,9	27,3	94,9	27,6	105	28,1	118	28,8
	100	72,1	32,2	79,7	32,6	87,7	33,0	98,5	33,5	108	34,0	115	34,4	123	34,8	136	35,5	152	36,3
	130	94	42,5	104	42,8	115	43,2	129	43,9	141	44,6	151	45,1	161	45,7	178	46,8	200	48,1
	150	105	53,7	116	53,5	127	53,3	142	53,3	155	53,3	165	53,4	176	53,6	194	54,0	217	54,5
	180	125	58,8	139	59,2	153	59,7	172	60,4	189	61,1	201	61,7	214	62,3	236	63,4	261	64,8
	210	140	67,7	156	68,2	172	68,6	193	69,1	212	69,5	226	69,7	240	70,0	264	70,5	291	71,1
	240	164	74,1	181	75,0	199	75,8	223	76,9	244	78,0	261	78,8	278	79,6	307	81,0	342	82,7
250	181	83,2	200	84,2	220	85,3	246	86,7	269	88,0	287	89,0	305	90,0	337	91,7	375	93,8	
45	080					66,9	29,4	74,7	29,5	82,3	29,8	87,7	30,0	93,4	30,3	103	30,6	116	30,8
	100					86,8	36,6	97,1	37,2	107	37,7	114	38,1	121	38,5	134	39,3	149	40,2
	130					113	47,9	127	48,4	140	49,1	149	49,6	159	50,2	175	51,2	196	52,6
	150					127	58,9	141	58,7	155	58,7	165	58,8	175	58,9	193	59,3	215	59,8
	180					151	65,9	169	66,6	187	67,4	199	68,0	211	68,6	232	69,8	256	71,2
	210					171	75,8	192	76,3	212	76,8	225	77,0	239	77,3	262	77,8	289	78,3
	240					197	83,7	220	84,9	242	86,1	258	86,9	274	87,8	302	89,3	336	91,1
250					217	93,9	242	95,4	267	96,9	284	97,9	301	99,0	331	101	368	103	
50	080							73,4	32,6	81,4	32,9	86,4	33,1	91,7	33,4	101	33,9	113	34,7
	100							95,7	41,3	106	41,9	113	42,3	120	42,7	132	43,5	146	44,4
	130							125	53,7	138	54,3	147	54,8	156	55,3	172	56,3	191	57,7
	150							140	64,9	155	64,8	165	64,9	175	65,0	192	65,3	213	65,8
	180							167	73,7	185	74,4	196	75,1	208	75,7	228	76,9	251	78,3
	210							191	84,5	212	85,0	225	85,3	238	85,6	260	8,0	286	86,5
	240							216	93,9	240	95,2	255	96,1	270	97,0	296	98,6	329	100
250							238	105	264	107	280	108	296	109	325	111	359	113	

- Integrated heating capacity graph



Note 1: HC tabulated does not include capacity drop during frosting period and defrost. The integrated Heating Capacity takes into consideration the capacity drop during frosting period and defrosting operation.

$$(HC_{\text{integrated}}) = (HC) \times (\text{Integrated correction factor during frosting period})$$

- Integrated heating capacity means the heating capacity during one cycle (between defrosting period and defrosting period), which is integrated and converted to heating capacity per hour.

- Integrated correction factor:

Tamb [°C] RH 85%	-10	-7	-4	0	4	7
Correction factor	0,96	0,95	0,92	0,87	0,90	1,00

Note 2: In case the surface of the heat exchanger is covered with snow, heating capacity drops temporarily although it differs with outdoor temperature (°CDB), relative humidity (RH) and frosting volume

NOTES

- 1 **Heating capacity (CAP)**
Capacity is according to Eurovent rating standard 6/C/003-2006 and valid for heated water range Dt = 3 - 8°C
- 2 **Power input (kW)**
Power input is total input according to Eurovent rating standard 6/C/003-2006: Compressor + fans + control circuit

Symbols:

- HC : Heating Capacity (kW)
- PI : Power Input (kW)
- LWC : Leaving Water Condensor temperature (°C)
- Tamb : Ambient temperature dry bulb (°C)

3TW57652-1A

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

EWYQ080-100DAYN(N)

01 Evaporateur	21 Transport beam
02 Condensator	22 Flowswitch
03 Compressor	23 Fan
04 Expansion valve + sight glass	24 Safety valve
05 Discharge stopvalve (Optional)	25 High pressure sensor
06 Suction stopvalve (Optional)	26 Low pressure sensor
07 Liquid stopvalve (Optional)	27 High pressure switch
08 Chilled water IN (Victaulic coupling)	28 Oil sight glass
09 Chilled water OUT (Victaulic coupling)	29 Waterfilter
10 Water drain evaporator	30 Frame
11 Air purge	31 4-way valve
12 Leaving water temperature sensor	32 Liquid receiver
13 Entering water temperature sensor	
14 Ambient temperature sensor	
15 Drier + charge valve	
16 Power supply intake	
17 Switchbox	
18 Digital display controller (Inside switchbox)	
19 Field wiring intake	
20 Main isolator switch	

Legend
 Required space around the unit for service and air intake
 Center of gravity

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EWYQ80-100DAYN(P-B)

01 Evaporateur	21 Transport beam
02 Condensator	22 Flowswitch
03 Compressor	23 Fan
04 Expansion valve + sight glass	24 Safety valve
05 Discharge stopvalve (Optional)	25 High pressure sensor
06 Suction stopvalve (Optional)	26 Low pressure sensor
07 Liquid stopvalve (Optional)	27 High pressure switch
08 Chilled water IN (Victaulic coupling)	28 Oil sight glass
09 Chilled water OUT (Victaulic coupling)	29 Waterfilter
10 Water drain evaporator	30 Frame
11 Air purge	31 4-way valve
12 Leaving water temperature sensor	32 Liquid receiver
13 Entering water temperature sensor	33 Pump (Optional)
14 Ambient temperature sensor	34 Buffertank (Optional)
15 Drier + charge valve	35 Expansion vessel (Optional)
16 Power supply intake	36 Water stopvalve (Optional)
17 Switchbox	37 Buffertank drain valve (Optional)
18 Digital display controller (Inside switchbox)	38 Regulating valve (Optional)
19 Field wiring intake	39 Water safety valve (Optional)
20 Main isolator switch	40 Pressure gauge (Optional)

Legend
 Required space around the unit for service and air intake
 Center of gravity

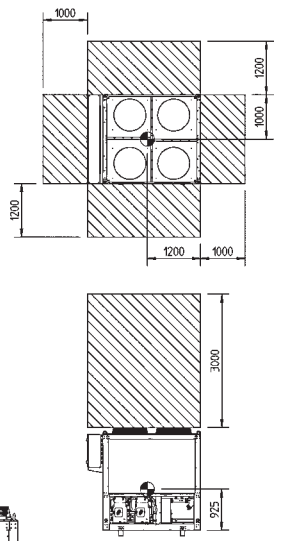
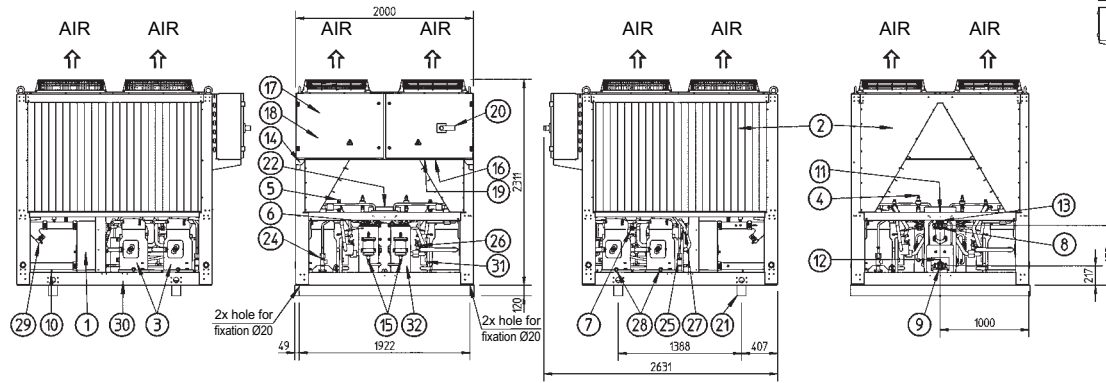
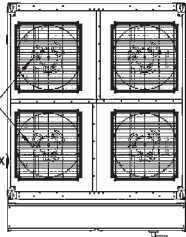
3TW57654-1

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

EWYQ130-150DAYN(N)

- | | |
|--|-------------------------|
| 01 Evaporateur | 21 Transport beam |
| 02 Condensor | 22 Flowswitch |
| 03 Compressor | 23 Fan |
| 04 Expansion valve + sight glass | 24 Safety valve |
| 05 Discharge stopvalve (Optional) | 25 High pressure sensor |
| 06 Suction stopvalve (Optional) | 26 Low pressure sensor |
| 07 Liquid stopvalve (Optional) | 27 High pressure switch |
| 08 Chilled water IN (Victaulic coupling) | 28 Oil sight glass |
| 09 Chilled water OUT (Victaulic coupling) | 29 Waterfilter |
| 10 Water drain evaporator | 30 Frame |
| 11 Air purge | 31 4-way valve |
| 12 Leaving water temperature sensor | 32 Liquid receiver |
| 13 Entering water temperature sensor | |
| 14 Ambient temperature sensor | |
| 15 Drier + charge valve | |
| 16 Power supply intake | |
| 17 Switchbox | |
| 18 Digital display controller (Inside switchbox) | |
| 19 Field wiring intake | |
| 20 Main isolator switch | |

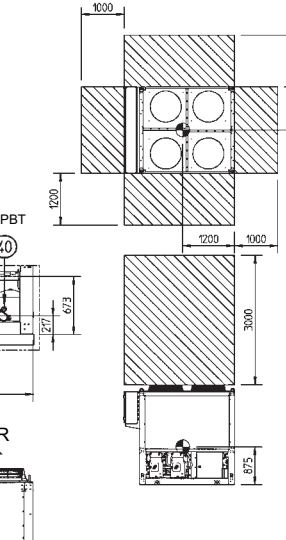
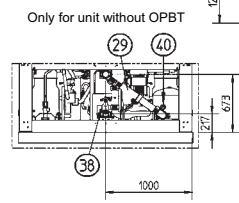
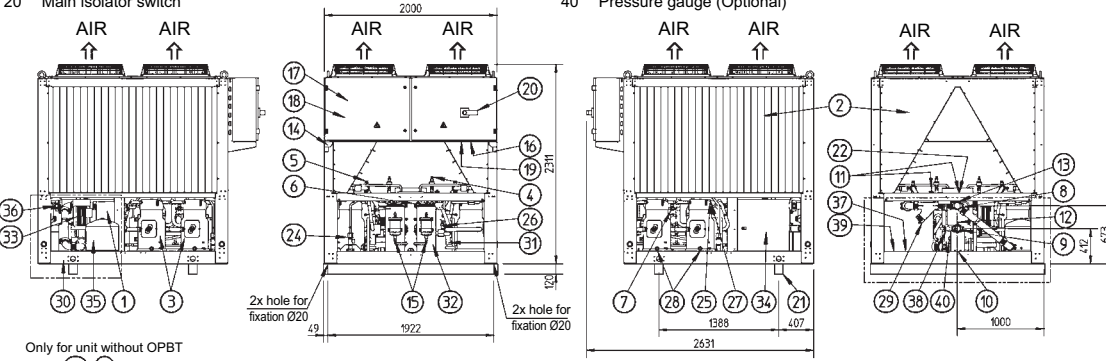
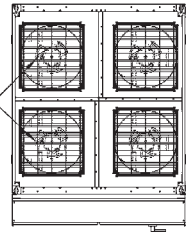


Legend
 Required space around the unit for service and air intake
 Center of gravity

3TW57674-2A

EWYQ130-150DAYN(P-B)

- | | |
|--|--------------------------------------|
| 01 Evaporateur | 21 Transport beam |
| 02 Condensor | 22 Flowswitch |
| 03 Compressor | 23 Fan |
| 04 Expansion valve + sight glass | 24 Safety valve |
| 05 Discharge stopvalve (Optional) | 25 High pressure sensor |
| 06 Suction stopvalve (Optional) | 26 Low pressure sensor |
| 07 Liquid stopvalve (Optional) | 27 High pressure switch |
| 08 Chilled water IN (Victaulic coupling) | 28 Oil sight glass |
| 09 Chilled water OUT (Victaulic coupling) | 29 Waterfilter |
| 10 Water drain evaporator | 30 Frame |
| 11 Air purge | 31 4-way valve |
| 12 Leaving water temperature sensor | 32 Liquid receiver |
| 13 Entering water temperature sensor | 33 Pump (Optional) |
| 14 Ambient temperature sensor | 34 Buffertank (Optional) |
| 15 Drier + charge valve | 35 Expansion vessel (Optional) |
| 16 Power supply intake | 36 Water stopvalve (Optional) |
| 17 Switchbox | 37 Buffertank drain valve (Optional) |
| 18 Digital display controller (Inside switchbox) | 38 Regulating valve (Optional) |
| 19 Field wiring intake | 39 Water safety valve (Optional) |
| 20 Main isolator switch | 40 Pressure gauge (Optional) |



Legend
 Required space around the unit for service and air intake
 Center of gravity

3TW57674-1A



1
6

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

EWYQ180-210DAYN(N)

01 Evaporateur	21 Transport beam
02 Condensor	22 Flowswitch
03 Compressor	23 Fan
04 Expansion valve + sight glass	24 Safety valve
05 Discharge stopvalve (Optional)	25 High pressure sensor
06 Suction stopvalve (Optional)	26 Low pressure sensor
07 Liquid stopvalve (Optional)	27 High pressure switch
08 Chilled water IN (Victaulic coupling)	28 Oil sight glass
09 Chilled water OUT (Victaulic coupling)	29 Waterfilter
10 Water drain evaporator	30 Frame
11 Air purge	31 4-way valve (Optional)
12 Leaving water temperature sensor	32 Liquid receiver
13 Entering water temperature sensor	
14 Ambient temperature sensor	
15 Drier + charge valve	
16 Power supply intake	
17 Switchbox	
18 Digital display controller (Inside switchbox)	
19 Field wiring intake	
20 Main isolator switch	

Legend

- Required space around the unit for service and air intake
- Center of gravity

3TW57694-2A

EWYQ180-210DAYN(P-B)

01 Evaporateur	21 Transport beam
02 Condensor	22 Flowswitch
03 Compressor	23 Fan
04 Expansion valve + sight glass	24 Safety valve
05 Discharge stopvalve (Optional)	25 High pressure sensor
06 Suction stopvalve (Optional)	26 Low pressure sensor
07 Liquid stopvalve (Optional)	27 High pressure switch
08 Chilled water IN (Victaulic coupling)	28 Oil sight glass
09 Chilled water OUT (Victaulic coupling)	29 Waterfilter
10 Water drain evaporator	30 Frame
11 Air purge	31 4-way valve
12 Leaving water temperature sensor	32 Liquid receiver
13 Entering water temperature sensor	33 Pump (Optional)
14 Ambient temperature sensor	34 Buffertank (Optional)
15 Drier + charge valve	35 Expansion vessel (Optional)
16 Power supply intake	36 Water stopvalve (Optional)
17 Switchbox	37 Buffertank drain valve (Optional)
18 Digital display controller (Inside switchbox)	38 Regulating valve (Optional)
19 Field wiring intake	39 Water safety valve (Optional)
20 Main isolator switch	40 Pressure gauge (Optional)

Legend

- Required space around the unit for service and air intake
- Center of gravity

3TW57694-1A

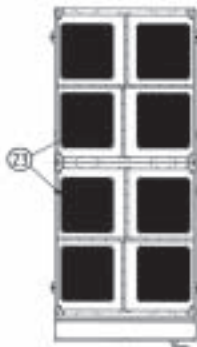
6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

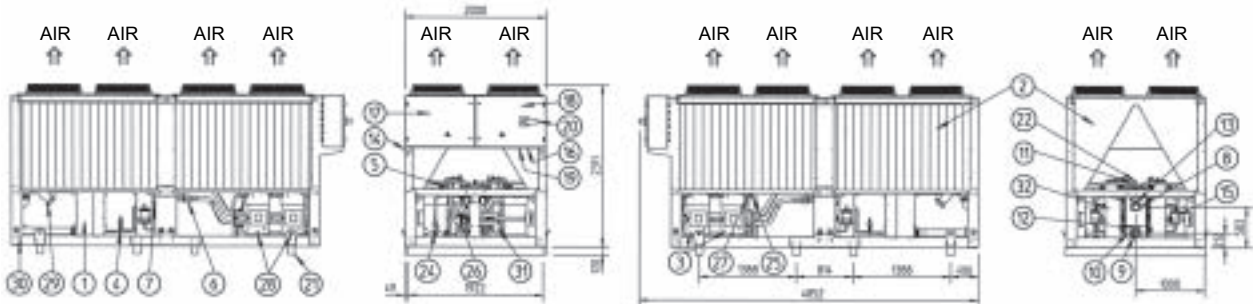
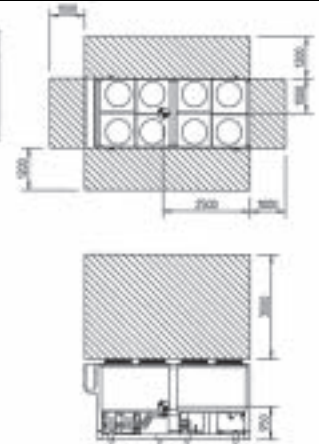
EWYQ230-250DAYN(N)

- 01 Evaporateur
- 02 Condensor
- 03 Compressor
- 04 Expansion valve + sight glass
- 05 Discharge stopvalve (Optional)
- 06 Suction stopvalve (Optional)
- 07 Liquid stopvalve (Optional)
- 08 Chilled water IN (Victaulic coupling)
- 09 Chilled water OUT (Victaulic coupling)
- 10 Water drain evaporator
- 11 Air purge
- 12 Leaving water temperature sensor
- 13 Entering water temperature sensor
- 14 Ambient sensor
- 15 Drier + charge valve
- 16 Power supply intake
- 17 Switchbox
- 18 Digital display controller (Inside switchbox)
- 19 Field wiring intake
- 20 Main isolator switch

Legend
 Required space around the unit for service and air intake
 Center of gravity



- 21 Transport beam
- 22 Flowswitch
- 23 Fan
- 24 Safety valve
- 25 High pressure sensor
- 26 Low pressure sensor
- 27 High pressure switch
- 28 Oil sight glass
- 29 Waterfilter
- 30 Frame
- 31 4-way valve
- 32 Liquid receiver

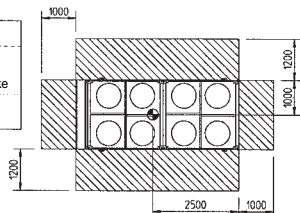
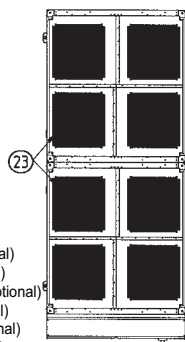


3TW57714-2

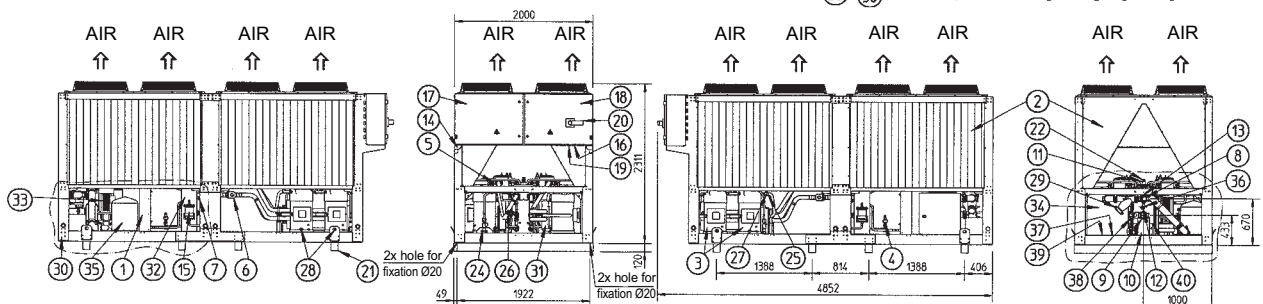
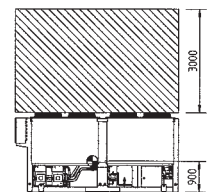
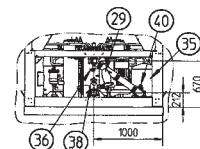
EWYQ230-250DAYN(P-B)

- 01 Evaporateur
- 02 Condensor
- 03 Compressor
- 04 Expansion valve + sight glass
- 05 Discharge stopvalve (Optional)
- 06 Suction stopvalve (Optional)
- 07 Liquid stopvalve (Optional)
- 08 Chilled water IN (Victaulic coupling)
- 09 Chilled water OUT (Victaulic coupling)
- 10 Water drain evaporator
- 11 Air purge
- 12 Leaving water temperature sensor
- 13 Entering water temperature sensor
- 14 Ambient temperature sensor
- 15 Drier + charge valve
- 16 Power supply intake
- 17 Switchbox
- 18 Digital display controller (Inside switchbox)
- 19 Field wiring intake
- 20 Main isolator switch
- 21 Transport beam
- 22 Flowswitch
- 23 Fan
- 24 Safety valve
- 25 High pressure sensor
- 26 Low pressure sensor
- 27 High pressure switch
- 28 Oil sight glass
- 29 Waterfilter
- 30 Frame
- 31 4-way valve
- 32 Liquid receiver
- 33 Pump (Optional)
- 34 Buffertank (Optional)
- 35 Expansion vessel (Optional)
- 36 Water stopvalve (Optional)
- 37 Buffertank drain valve (Optional)
- 38 Regulating valve (Optional)
- 39 Water safety valve (Optional)
- 40 Pressure gauge (Optional)

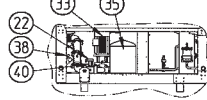
Legend
 Required space around the unit for service and air intake
 Center of gravity



Only for unit without OPBT



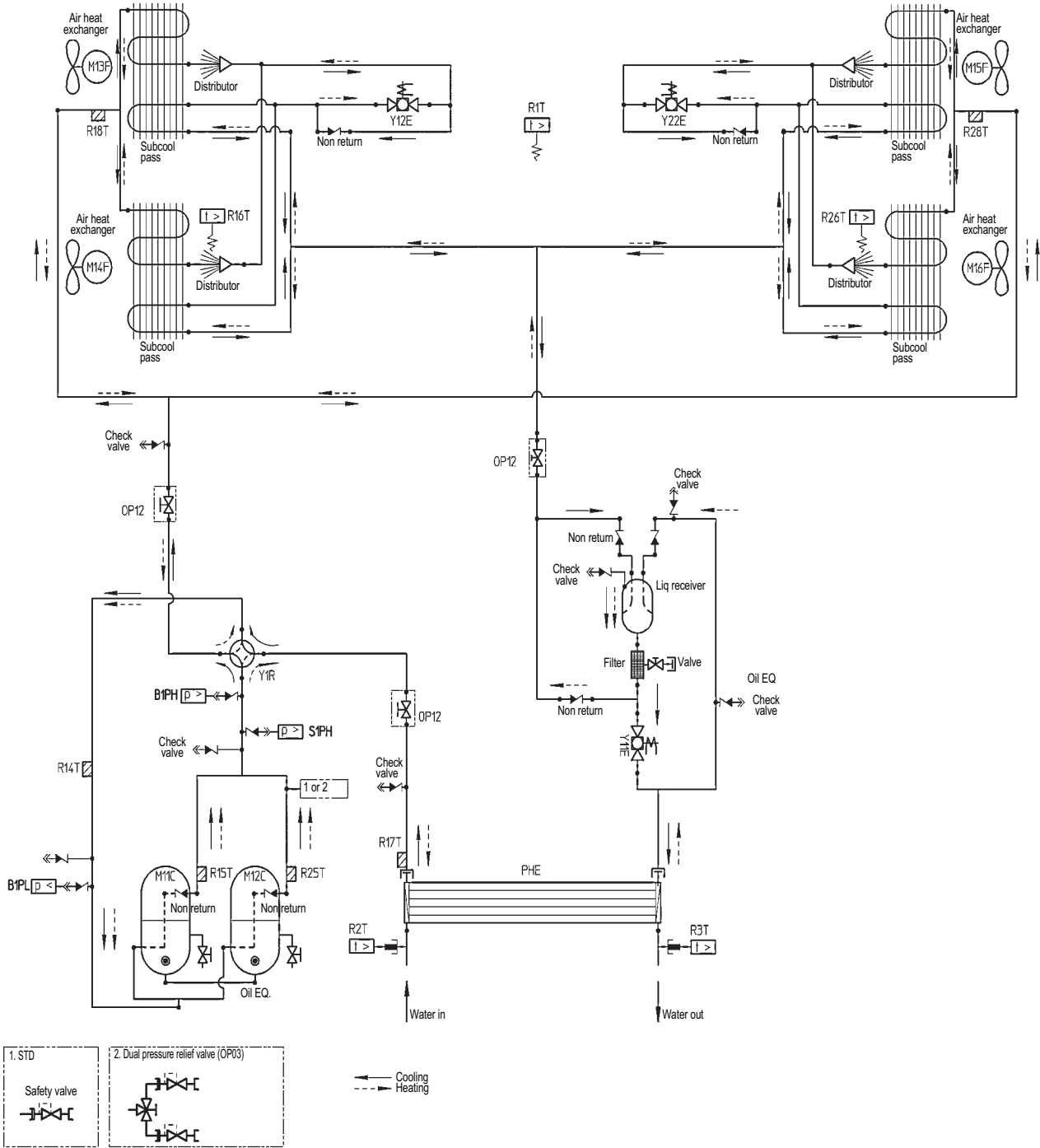
Only for unit without OPBT



3TW57714-1

7 Piping diagram

EWYQ080-100DAYN (N-P-B)(piping diagram)



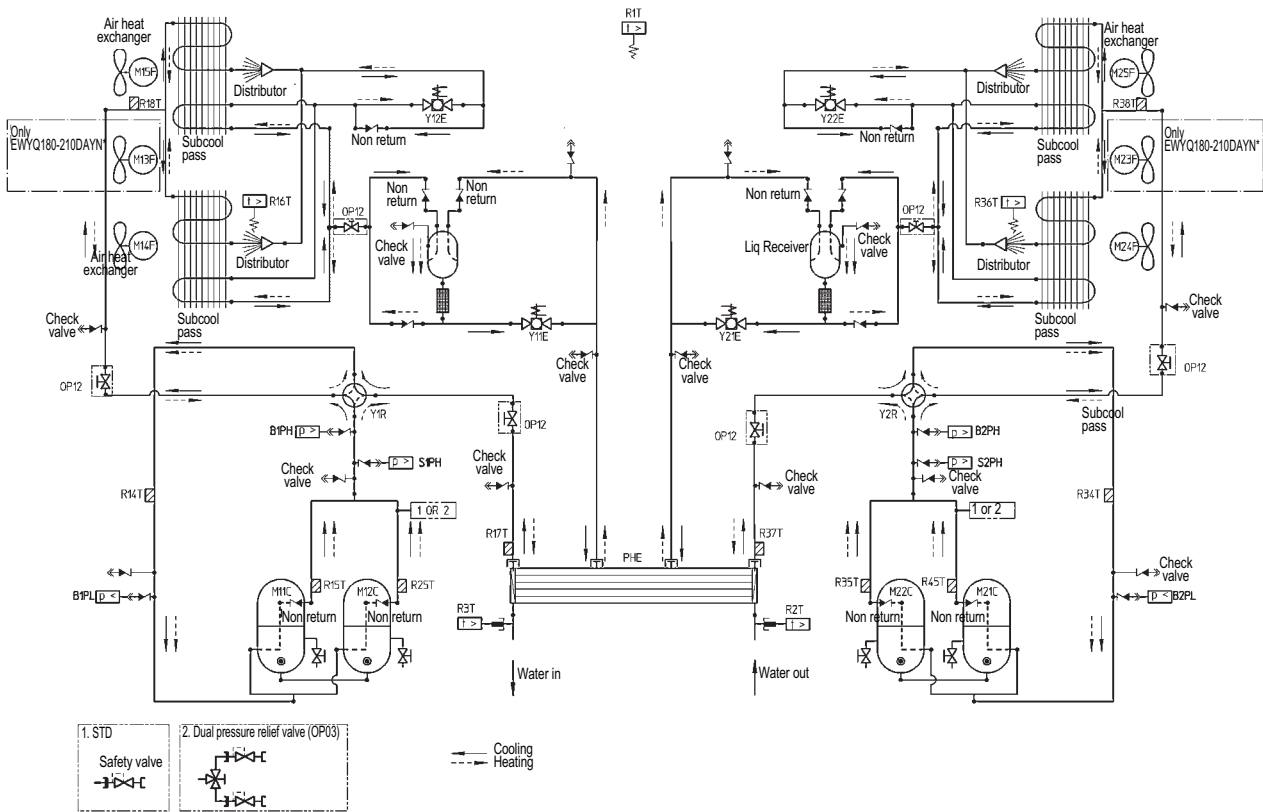
MERK	BENAMING	R15T, R25T	Discharge temperature sensor
M11-12C	Compressor motors	B1PH	High pressure sensor
M13-16F	Fan motors	B1PL	Low pressure sensor
R14T	Suction temperature sensor	Y11E	Electronic Expansion valve cooling
R17T	Refrigerant piping temperature sensor	Y12E, Y22E	Electronic expansion valve heating coil 1
R18T, R28T	Heating suction piping temperature sensor	R1T	Ambient temperature sensor
R16T, R26T	Coil temperature sensor	R2T	Evaporator inlet water temperature sensor
S1PH	High pressure switch	R3T	Evaporator outlet water temperature sensor
Y1R	Reverse valve		

- : Check valve
- : Flare Conn.
- : Screw conn.
- : Flange conn.
- : Pinched pipe
- : Spinned pipe

3TW57655-1B

7 Piping diagram

EWYQ130-210DAYN (N-P-B)(piping diagram)



Merk	Benaming		
M11-12C	Compressor motors circuit 1	R36T	Coil temperature sensor circuit 2
M13-15F	Fan motors circuit 1	R37T	Refrigerant piping temperature sensor circuit 2
R14T	Suction temperature sensor circuit 1	R38T	Heating suction temp sensor circuit 2
R16T	Coil temperature sensor circuit 1	S2PH	High pressure switch circuit 2
R17T	Refrigerant piping temperature sensor circuit 1	Y2R	Reverse valve circuit 2
R18T	Heating suction temp sensor circuit 1	R35T, R45T	Discharge temperature sensor circuit 2
S1PH	High pressure sensor circuit 1	B2PH	High pressure sensor circuit 2
B1PL	Low pressure sensor circuit 1	B2PL	Low pressure sensor circuit 2
Y11E	Electronic Expansion valve cooling circuit 1	Y21E	Electronic Expansion valve cooling circuit 2
Y12E	Electronic expansion valve heating circuit 1	Y22E	Electronic expansion valve heating circuit 2
M21-22C	Compressor motors circuit 2	R1T	Ambient temperature sensor
M23-25F	Fan motors circuit 2	R2T	Evaporator inlet water temperature sensor
R34T	Suction temperature sensor circuit 2	R3T	Evaporator outlet water temperature sensor

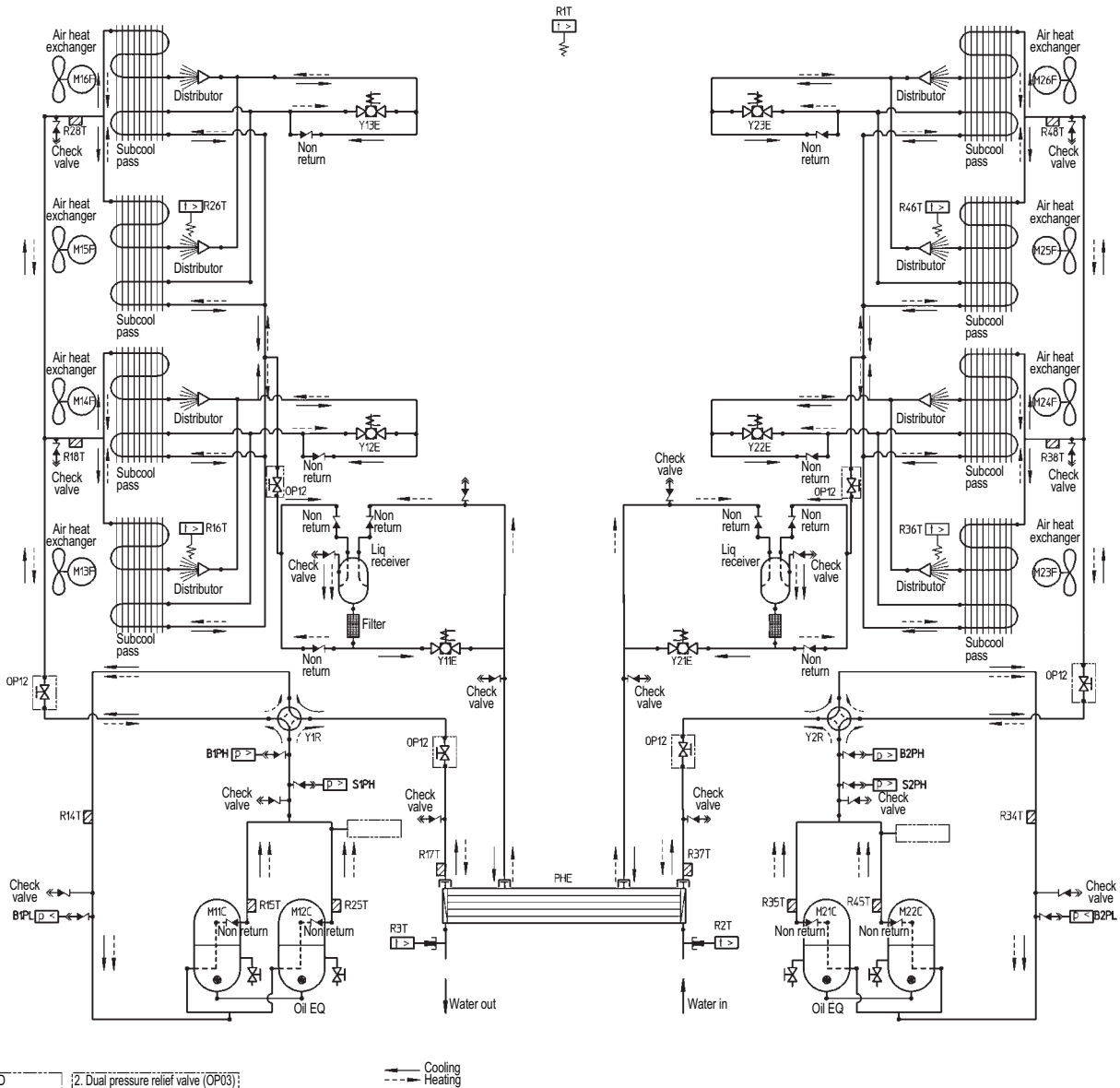
- ↔ : Check valve
- ↔ : Flare Conn.
- | : Screw conn.

- | : Flange conn.
- ✕ : Pinched pipe
- : Spinned pipe

2TW57675-1A

7 Piping diagram

EWYQ230-250DAYN(N-P-B) (piping diagram)



MERK	BENAMING	M23-26F	Fan motors circuit 2
M11-12C	Compressor motors circuit 1	R34T	Suction temperature sensor circuit 2
M13-16F	Fan motors circuit 1	R36T, R46T	Coil temperature sensor circuit 2
R14T	Suction temperature sensor circuit 1	R37T	Refrigerant piping temperature sensor circuit 2
R16T, R26T	Coil temperature sensor circuit 1	S2PH	High pressure switch circuit 2
R17T	Refrigerant piping temperature sensor circuit 1	Y2R	Reverse valve circuit 2
S1PH	High pressure switch circuit 1	R35T, R45T	Discharge temperature sensor circuit 2
Y1R	Reverse valve circuit 1	B2PH	High pressure sensor circuit 2
R15T, R25T	Discharge temperature sensor circuit 1	B2PL	Low pressure sensor circuit 2
B1PH	High pressure sensor circuit 1	Y21E	Electronic expansion valve cooling circuit 2
B1PL	Low pressure sensor circuit 1	R38T, R48T	Heating suction temperature sensor circuit 2
Y11E	Electronic expansion valve cooling circuit 1	Y22E, Y23E	Electronic expansion valve heating circuit 2
R18T, R28T	Heating suction temperature sensor circuit 1	R1T	Ambient temperature sensor
Y12E, Y13E	Electronic expansion valve heating circuit 1	R2T	Evaporator inlet water temperature sensor
M21-22C	Compressor motors circuit 2	R3T	Evaporator outlet water temperature sensor

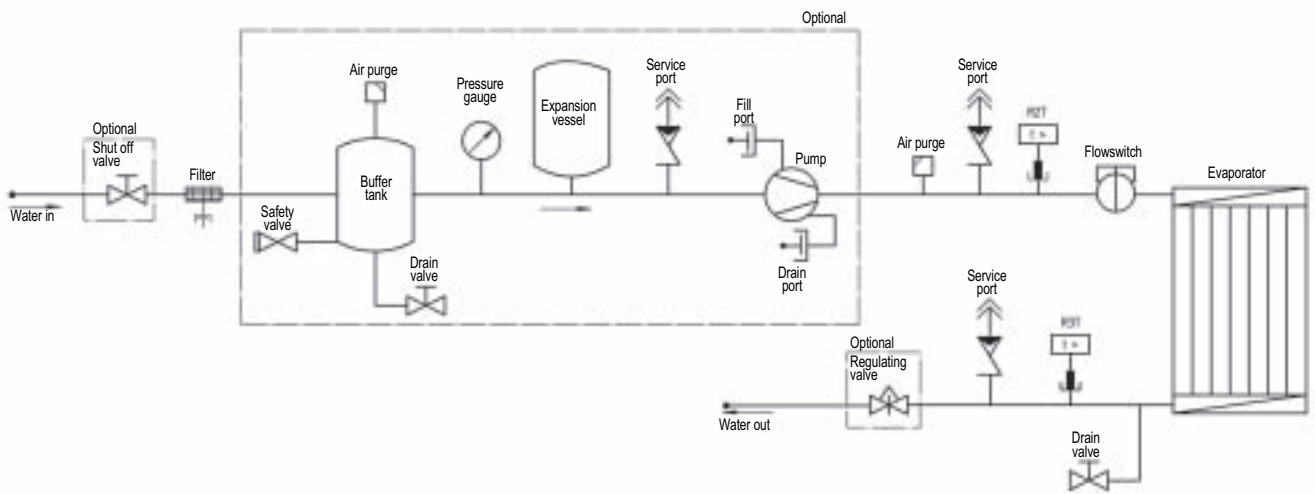
- ⤵ : Check valve
- ⤵ : Flare Conn.
- ⤵ : Screw conn.
- ⊥ : Flange conn.
- × : Pinched pipe
- : Spinned pipe

2TW57715-1

7 Piping diagram

1
7

EWAQ-EWYQ-DAYN(N-P-B)(water piping diagram)



- ⏏ : Check valve
- ↔ : Flare Conn.
- ⌋ : Screw conn.

- ⌋⌋ : Flange conn.
- × : Pinched pipe
- : Spinned pipe

3TW57575-2A

8 Wiring diagram

8 - 1 External connection diagram

LEGEND

Translation of this legend can be found in the installation manual.

Obligatory	Not included with standard unit	
	Not possible as option	Possible as option
Not obligatory	#	##

Part number	Description
A02P	** Communication PCB (EKACPG)
A0P	** PCB wired remote control
ASP	** PCB wired remote control (EKRUJPG)
ESH	* fieldheater
FT.F2.F3	# main fuses
F4.F5	# fuses for heaters
H11, H2, H1, H2.ZP	* indication lamp: operation compressor
H1P	* indication lamp: alarm signal (default NO)
H2, H3, H4, H5, H6P	* indication lamp for changeable digital outputs
K1P	## pump contactor (Only OPSP/OPHP/OPSC/OPTP/OPTC)
K2P	** pump contactor (Only for OPTP/OPTC)
K1S	* overcurrent relay pump (PB unit or OPSC)
M1P	* pump motor 1 (Only OPSP/OPHP/OPSC/OPTP/OPTC)
M2P	* pump motor 2 (Only for OPTP/OPTC)
R8T	* temperature sensor for changeable analog input
S1M	* main isolator switch
S1, 2, 3, 4, 5S	* switch for changeable digital input
S2M	# heater tape isolator switch
V2C	** ferrite core (EKACPG)

Options (factory installed)	
OPSP	=Single pump
OPTP	=Twin pump
OPSC	=Single pump contactor
OPTC	=Twin pump contactor
OPHP	=HI ESP pump
OPIF	=Inverter fans

Options (user installed)	
EKACPG	=Address card including RS 485 (Integrated modbus)
FT.F2	=DCIN+DBACS connection
EKRUPG	=Remote user interface

N-Model	=unit with no options included
Ch.	=Changeable

(1) Fieldwiring: Main power connection

(1) Fieldwiring: communication wiring

Changeable I/O possible functions

Refer to the installation manual for instructions how to configure changeable I/O

Changeable digital input (4 available)

- None
- Status
- Dual setpoint
- Remote on-off
- Capacity limitation 25%, 50%, 75% or setting
- Low noise (only for OPIF)
- Free cooling signal
- Fan forced on

Changeable analog output (1 available)

- None
- Unit Capacity (mA, V)
- Details of types
- Type mA: 0..20mA/4..20mA
- Type V: 0..1V/0.5V/0..10V

Changeable digital output (6 or 5 available depending on unit)

- None
- Closed
- 2nd pump
- 100% capacity
- Full capacity
- Free cooling
- General operation
- Safety/warning NO
- Safety/warning NC (only for Ch.D01)
- Safety NO (excluding warning)
- Safety NC (excluding warning) (only for Ch.D01)
- C1, C2 Safety NO
- Warning NO
- C1, C2 operation
- Cooling (only EWYQ)
- Heating (only EWYQ)
- Default (only EWYQ)

Changeable analog input (4 available)

- None
- Status (mA, V, NTC, DI)
- Floating setpoint (mA, V, NTC*)
- Water temperature measurement (NTC*)
- Changeable DI, refer to Ch DI for possibilities (DI)
- Details of types:
- Type mA: 0..20mA/4..20mA (internal 5V or external power supply)
- Type V: 0..1V/0.5V/0..10V
- Type DI: DI (5V detection)

*: for allowed NTC types and how to configure the software please contact your local dealer.

Description	Drawing number	Revision	Page
Connection diagram	4TW57579-2	B	1
Unit name: EWYQ/EWYQ 80-260			

1
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(3) Fieldwiring: Digital input terminals

OBLIGATORY FOR MODELS WITHOUT OPSC/OPTC/OPSP/OPTP/OPHP

(4) Fieldwiring: Analog input terminals (connection is depending on type setting: NTC or mA or V or DI)

Ch.AI1 Example type: NTC
Ch.AI2 Example type: mA measurement
Ch.AI3 Example type: V-measurement
Ch.AI4 Example type: DI switch

(5) Fieldwiring: Analog output terminals (types: mA or V)

Ch.AO1 Example type: mA or V output

(6) Fieldwiring: Output terminals

Fieldheater contact (max 1kW resistive, 230 VAC)
Pump contact for models without OPSC/OPTC/OPSP/OPTP/OPHP (Maximum load: 2A-230VAC, Minimum load: 10mA-5VDC)
Operation compressor contact AC15 (max 3A, 230VAC)
Changeable digital output terminals (Maximum load: 2A-230VAC, Minimum load: 10mA-5VDC)

Description	Drawing number	Revision	Page
Connection diagram	4TW57579-2	B	2
Unit name: EWYQ/EWYQ 80-260			

DAIKIN • Applied Systems • Chillers

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9 Sound data

9 - 1 Sound power spectrum

EWAQ-EWYQ-DAYN(N-P-B)

STD - Units	Sound power Lw per Octva band (dB)								Total (dBA)
	63	125	250	500	1000	2000	4000	8000	LwA
EWAQ080DAYN*	64	69	73	83	80	77	71	63	86
EWAQ100DAYN*	63	69	74	82	81	80	73	61	86
EWAQ130DAYN*	64	70	73	81	85	80	72	61	88
EWAQ150DAYN*	65	74	75	85	84	80	74	65	89
EWAQ180DAYN*	70	75	79	85	86	82	75	64	90
EWAQ210DAYN*	68	75	80	86	87	84	77	65	91
EWAQ240DAYN*	66	71	75	88	84	84	76	57	91
EWAQ260DAYN*	67	71	75	91	86	82	77	58	93
EWYQ080DAYN*	64	69	73	83	80	77	71	63	86
EWYQ100DAYN*	63	69	74	82	81	80	73	61	86
EWYQ130DAYN*	64	70	73	81	85	80	72	61	88
EWYQ150DAYN*	65	74	75	85	84	80	74	65	89
EWYQ180DAYN*	70	75	79	85	86	82	75	64	90
EWYQ210DAYN*	68	75	80	86	87	84	77	65	91
EWYQ230DAYN*	66	71	75	88	84	84	76	57	91
EWYQ250DAYN*	67	71	75	91	86	82	77	58	93

OPLN:
 (Compressor insulation + inverter fans)
 A sound reduction is obtained up to 5 dBA in full operation,
 depending on the operation condition.

NOTES

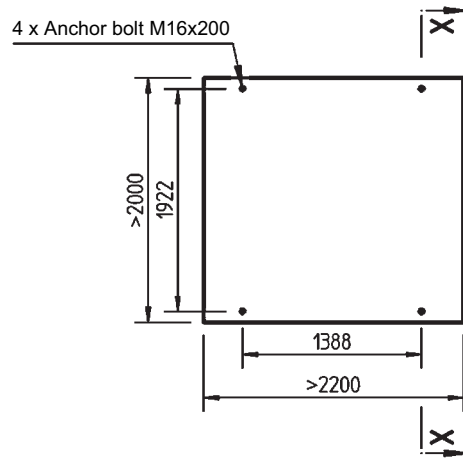
- 1 Data valid at nominal operation condition
- 2 According to ISO9614-2

4TW57577-1B

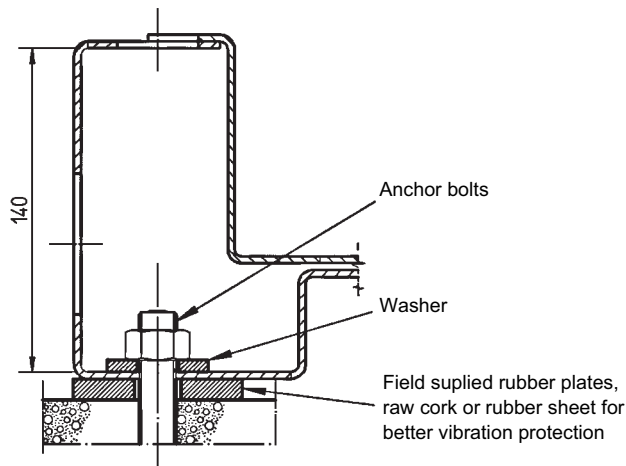
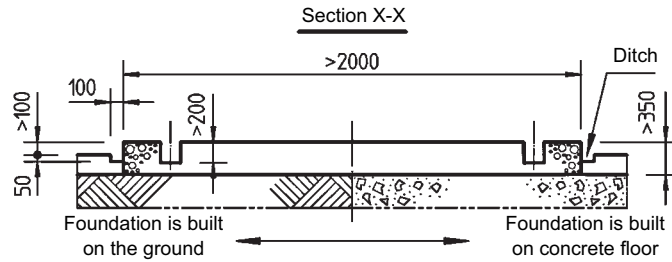
10 Installation

10 - 1 Fixation and foundation of units

EWAQ-EWYQ080-150DAYN(N-P-B)

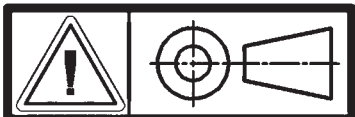


Fix anchor bolts into the concrete foundation. The concrete foundation should be higher than the floor level by approximately 100 mm for ease of plumbing work and better drain. Further, strength of the floor should be sufficient to support the weights of concrete foundation and unit. Be certain that foundation surface is even and flat.



NOTES

- 1 The measurement tabulated is based on the fact the base is made in the ground or on a concrete floor. In case the base is made on a concrete floor. In case the base is made on a rigid concrete floor, it is possible to include thickness of concrete floor, in that of the base.
- 2 In case a base is made on concrete floor, be sure to provide a ditch as shown. It is important to extract drainage regardless of whether a base is made in the ground or on the concrete floor. (Ditch → Sewerage).
- 3 Ingredient ratio of the concrete is cement: 1, sand: 2, gravel: 3, which is standard and insert iron bars of $\varnothing 10$ at every interval of 300mm. The edge of the concrete base should be planed.



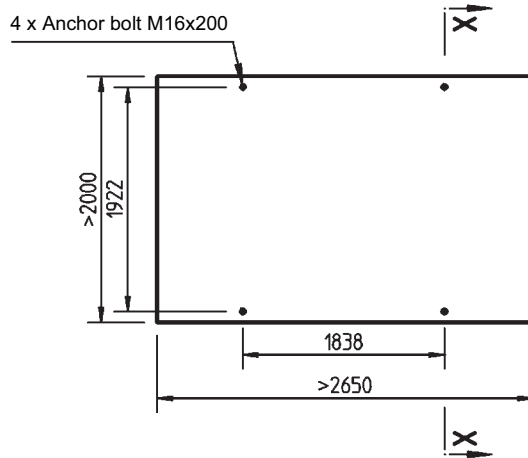
4TW57599-1

10 Installation

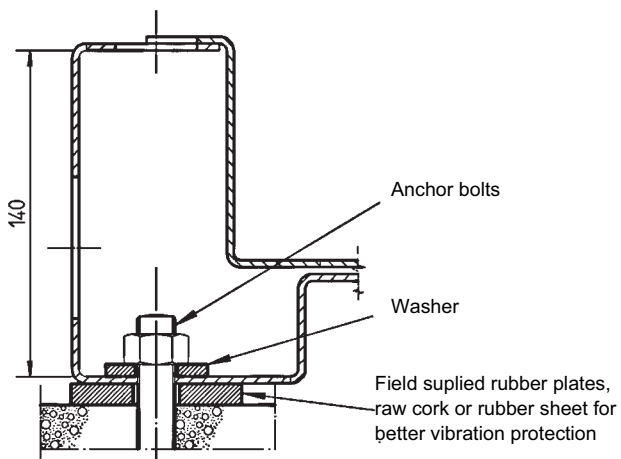
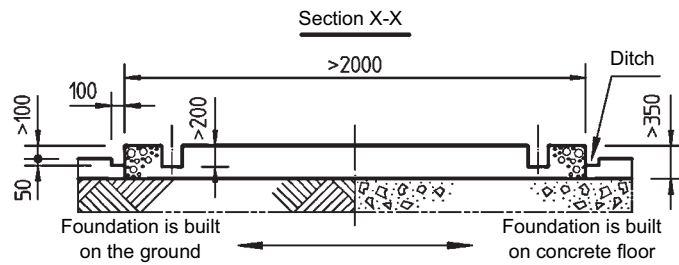
10 - 1 Fixation and foundation of units

EWAQ-EWYQ180-210DAYN(N-P-B)

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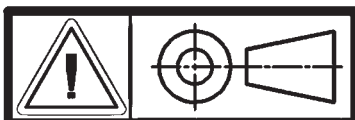


Fix anchor bolts into the concrete foundation. The concrete foundation should be higher than the floor level by approximately 100 mm for ease of plumbing work and better drain. Further, strength of the floor should be sufficient to support the weights of concrete foundation and unit. Be certain that foundation surface is even and flat.



NOTES

- 1 The measurement tabulated is based on the fact the base is made in the ground or on a concrete floor. In case the base is made on a concrete floor. In case the base is made on a rigid concrete floor, it is possible to include thickness of concrete floor, in that of the base.
- 2 In case a base is made on concrete floor, be sure to provide a ditch as shown. It is important to extract drainage regardless of whether a base is made in the ground or on the concrete floor. (Ditch → Sewerage).
- 3 Ingredient ratio of the concrete is cement: 1, sand: 2, gravel: 3, which is standard and insert iron bars of $\varnothing 10$ at every interval of 300mm. The edge of the concrete base should be planed.

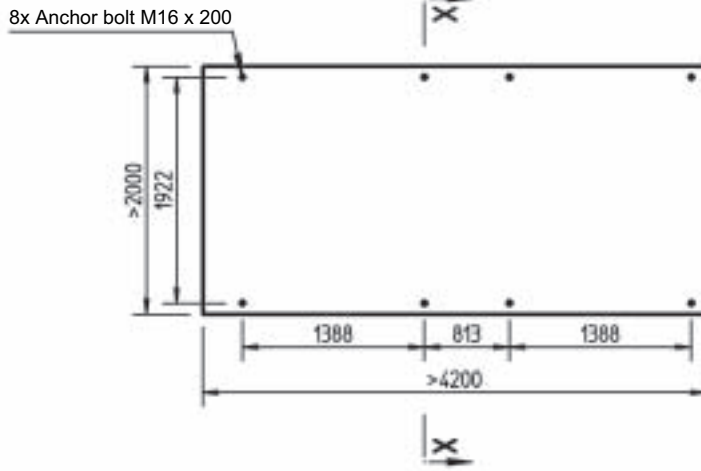


4TW57619-1

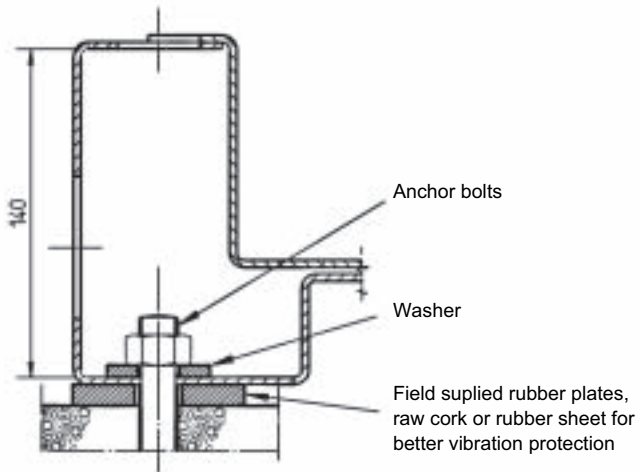
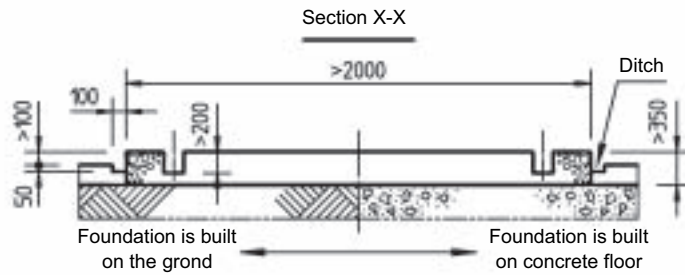
10 Installation

10 - 1 Fixation and foundation of units

EWAQ240-260DAYN(N-P-B)_EWYQ230-250DAYN(N-P-B)



Fix anchor bolts into the concrete foundation. The concrete foundation should be higher than the floor level by approximately 100 mm for ease of plumbing work and better drain. Further, strength of the floor should be sufficient to support the weights of concrete foundation and unit. Be certain that foundation surface is even and flat.



NOTES

- 1 The measurement tabulated is based on the fact the base is made in the ground or on a concrete floor. In case the base is made on a rigid concrete floor, it is possible to include thickness of concrete floor in that of the base.
- 2 In case a base is made on concrete floor, be sure to provide a ditch as shown. It is important to extract drainage regardless of whether a base is made in the ground or on the concrete floor. (Ditch → Sewerage).
- 3 Ingredient ratio of the concrete is cement: 1, sand:2, gravel:3, which is standard and insert iron bars of $\varnothing 10$ at every interval of 300mm. The edge of the concrete base should be planed.



4TW57639-1

10 Installation

10 - 2 Water charge, flow and quality

10

ITEMS (1) (5)	Cooling water (3)		Cooled water		Heated water (2)			Tendency if out of criteria
	Circulating system		Circulating water [Below 20°C]	Supply water (4)	Low temperature		High temperature	
	Circulating water	Once flow			Circulating water [20°C ~ 60°C]	Supply water (4)		
pH	6.5-8.2	6.0-8.0	6.8-8.0	6.8-8.0	7.0-8.0	7.0-8.0	7.0-8.0	Corrosion + scale
Electrical conductivity	Below 80	Below 30	Below 40	Below 40	Below 30	Below 30	Below 30	Corrosion + scale
	(Below 800)	(Below 300)	(Below 400)	(Below 400)	(Below 300)	(Below 300)	(Below 300)	Corrosion + scale
Chloride ion	Below 200	Below 50	Below 50	Below 50	Below 50	Below 30	Below 30	Corrosion
Sulfate ion	Below 200	Below 50	Below 50	Below 50	Below 50	Below 30	Below 30	Corrosion
M-alkalinity (pH4.8)	Below 100	Below 50	Below 50	Below 50	Below 50	Below 50	Below 50	Scale
Total hardness	Below 200	Below 70	Below 70	Below 70	Below 70	Below 70	Below 70	Scale
Calcium hardness	Below 150	Below 50	Below 50	Below 50	Below 50	Below 50	Below 50	Scale
Silica ion	Below 50	Below 30	Below 30	Below 30	Below 30	Below 30	Below 30	Scale
Iron	Below 1.0	Below 0.3	Below 1.0	Below 0.3	Below 1.0	Below 0.3	Below 0.3	Corrosion + scale
Copper	Below 0.3	Below 0.1	Below 1.0	Below 1.0	Below 1.0	Below 0.1	Below 0.1	Corrosion
Sulfite ion	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Corrosion
Ammonium ion	Below 1.0	Below 0.1	Below 1.0	Below 1.0	Below 0.3	Below 0.1	Below 0.1	Corrosion
Remaining chloride	Below 0.3	Below 0.3	Below 0.3	Below 0.3	Below 0.25	Below 0.1	Below 0.3	Corrosion
Free carbide	Below 4.0	Below 4.0	Below 4.0	Below 4.0	Below 0.4	Below 0.4	Below 4.0	Corrosion
Stability index	6.0-7.0	---	---	---	---	---	---	Corrosion + scale

3TW50179-1

1 Names, definitions and units are according to JIS K 0101. Units and figures between brackets are old units published as reference only.

2 In case of using heated water (more than 40°C), corrosion is generally noticeable.

Especially when the iron material is in direct contact with water without any protection shields, it is desirable to give the valid measures for corrosion, e.g. chemical measure.

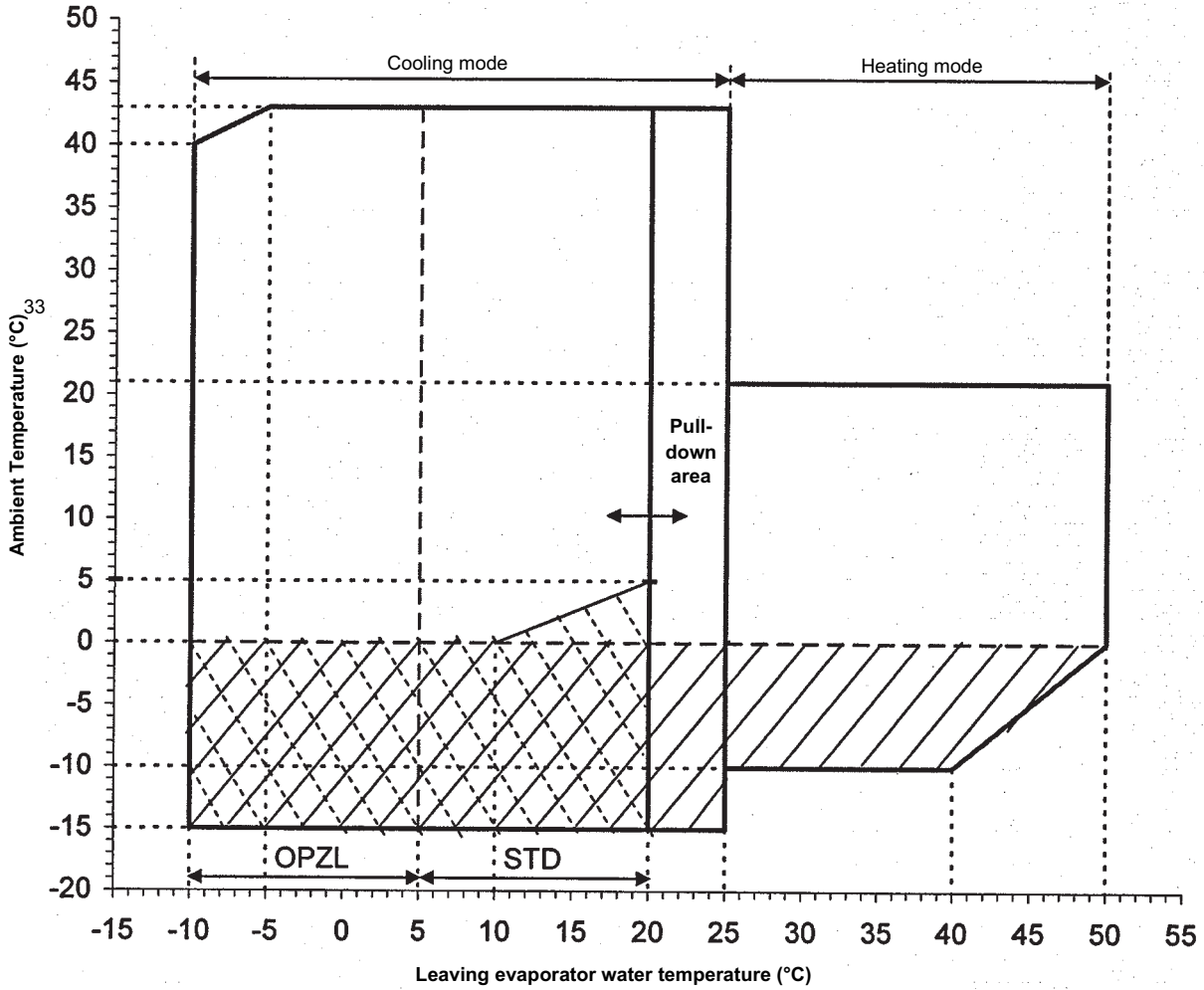
3 In the cooling water using hermetic cooling tower, closed circuit water is according to heated water standard, and scattered water is according to cooling water standard.

4 Supply water is considered drink water, industrial water and ground water except for genuine water, neutral water and soft water.

5 The above mentioned items are representable items in corrosion and scale cases.

11 Operation range

EWYQ080-100-180-210-230-250DAYN(N-P-B)



STD: Standard unit

OPZL: Leaving water evaporator from -10 to 5°C by use of glycol



Protect the water circuit against freezing by:

* OR OP10: heater tape

* Or filling up the system with a glycol solution

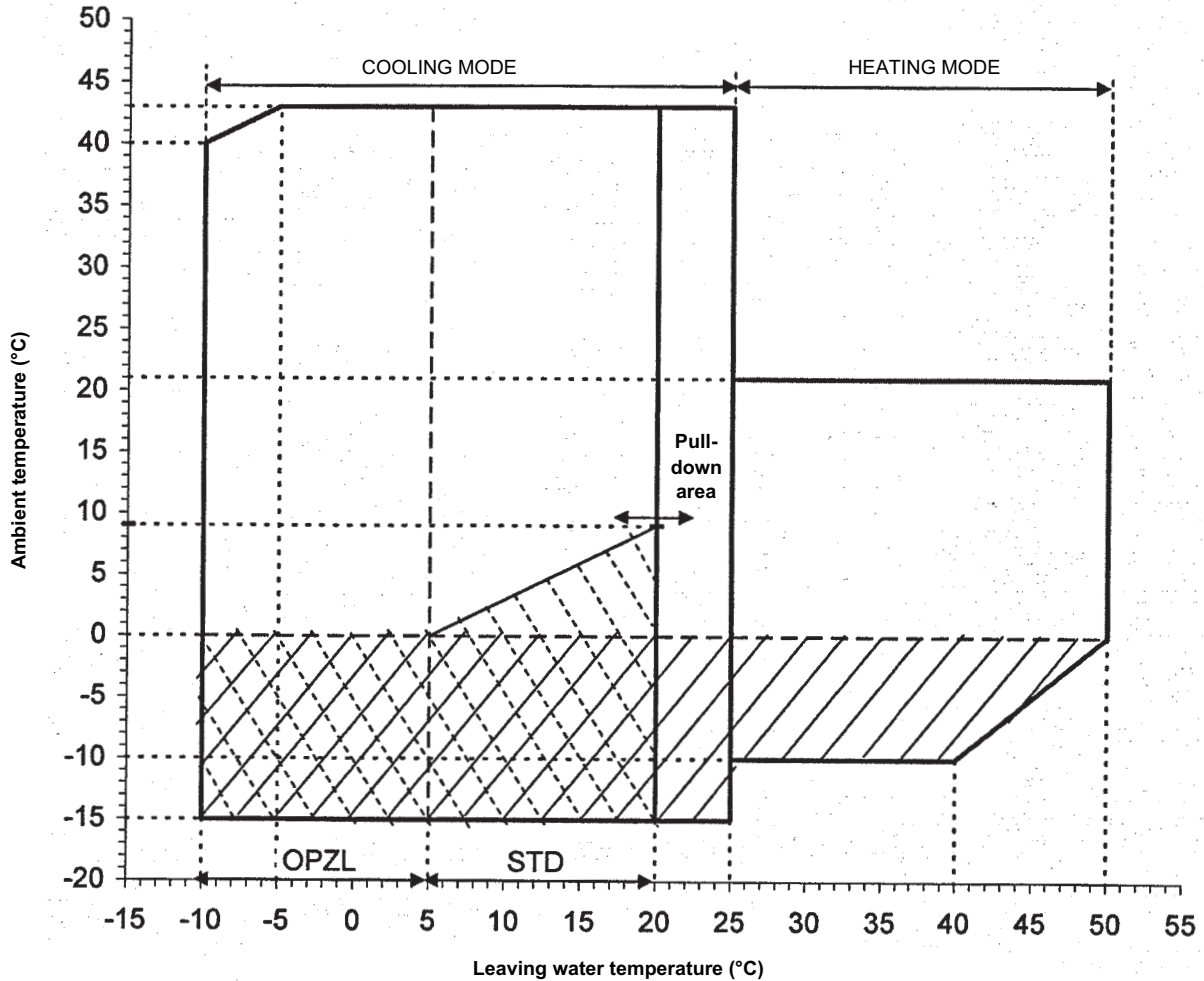


OPIF: Option Inverter Fans EWYQ080-100-180-210-230-250

3TW57703-1A

11 Operation range

EWYQ130-150DAYN(N-P-B)



STD: Standard unit

OPZL: Leaving water evaporator from -10 to 5°C by use of glycol



Protect the water circuit against freezing by:

* OR OP10: heater tape

* Or filling up the system with a glycol solution

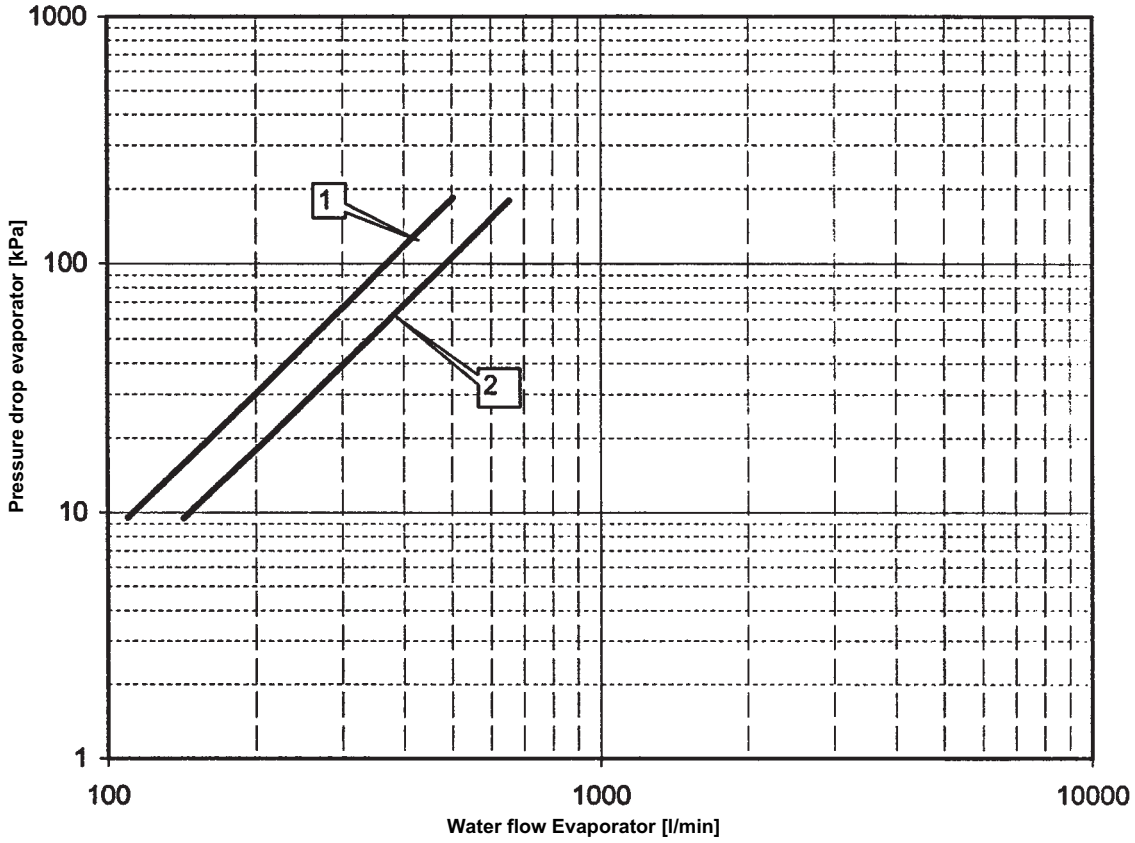


OPIF Option Inverter Fans EWYQ130-150

12 Hydraulic performance

12 - 1 Water pressure drop curve evaporator

EWYQ80-100DAYN(N-P-B)



- 1. EWYQ80DAYN*
- 2. EWYQ100DAYN*

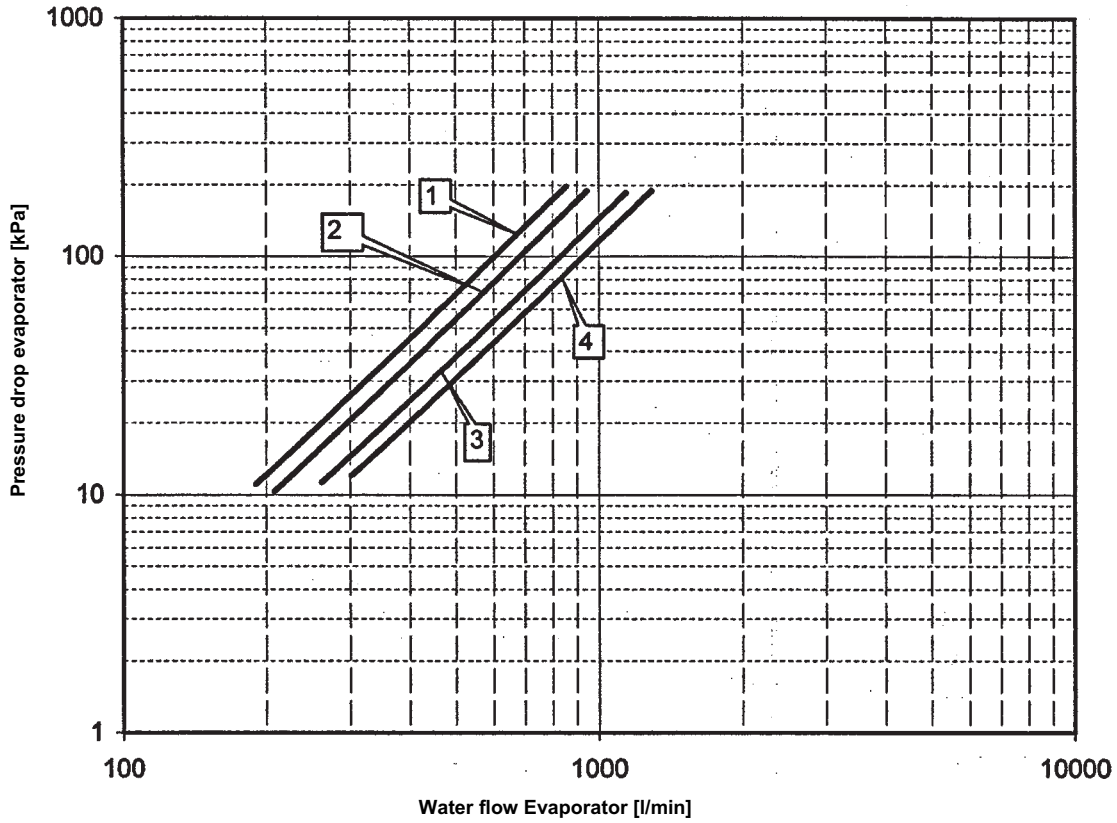
Warning:
 Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57659-5

12 Hydraulic performance

12 - 1 Water pressure drop curve evaporator

EWYQ130-210DAYN(N-P-B)



- 1. EWYQ130DAYN*
- 2. EWYQ150DAYN*
- 3. EWYQ180DAYN*
- 4. EWYQ210DAYN*

Warning:

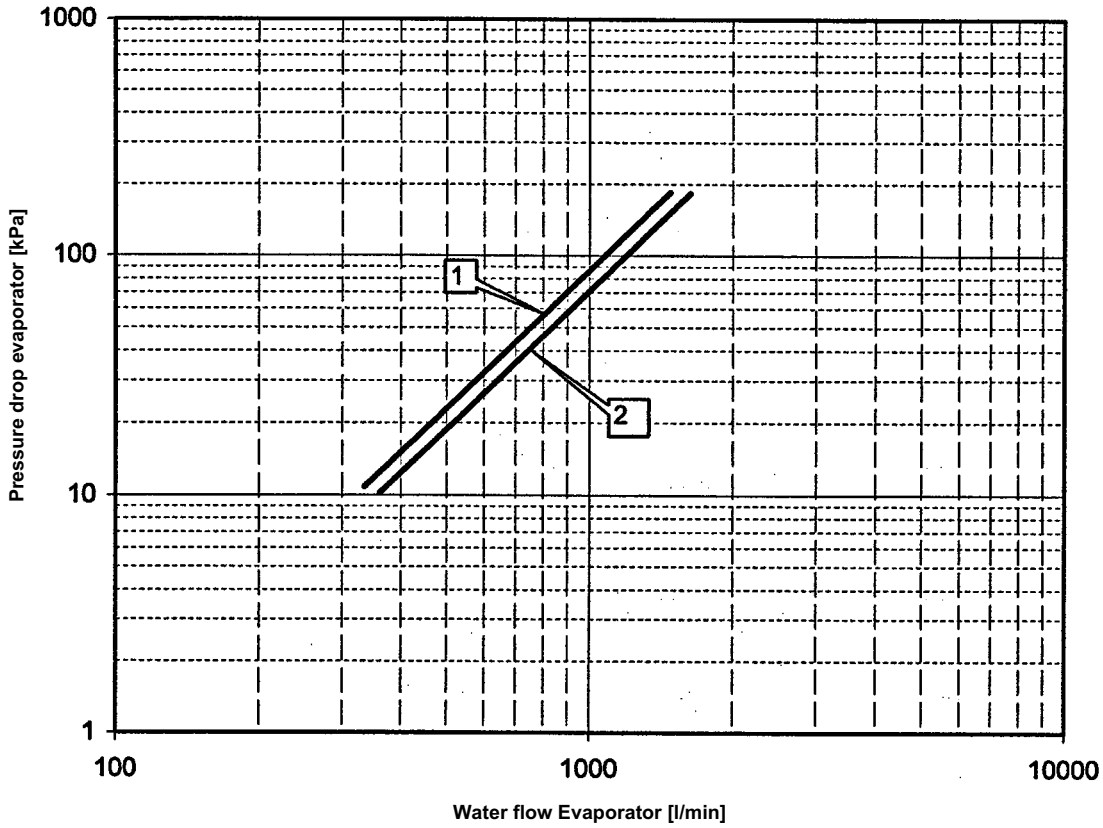
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57679-5

12 Hydraulic performance

12 - 1 Water pressure drop curve evaporator

EWYQ230-250DAYN(N-P-B)



1. EWYQ230DAYN*
2. EWYQ250DAYN*

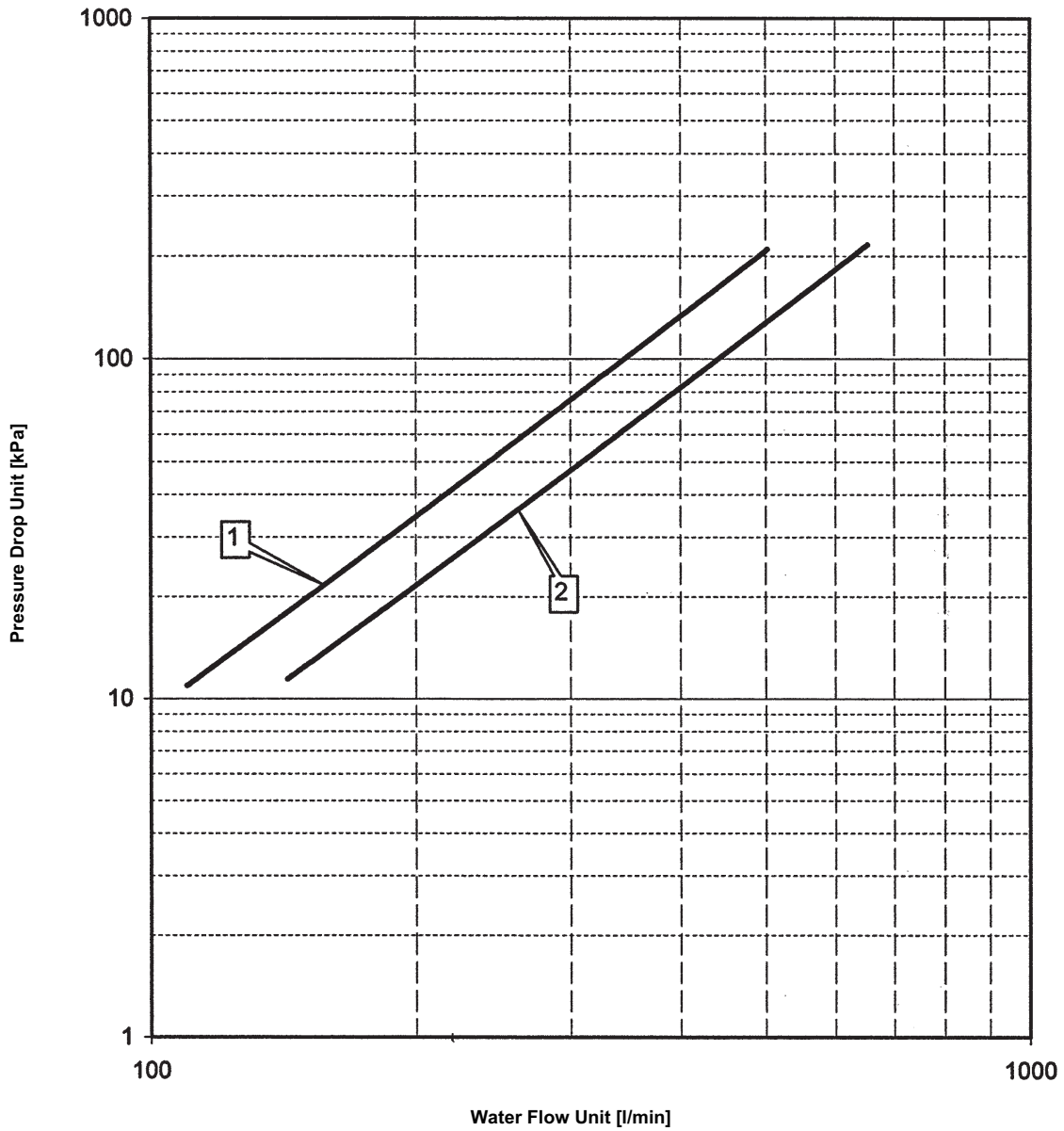
Warning:
 Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57719-5

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ080-100DAYN(N)



- 1. EWYQ080DAYN* Standard model
- 2. EWYQ100DAYN* Standard model

Warning:

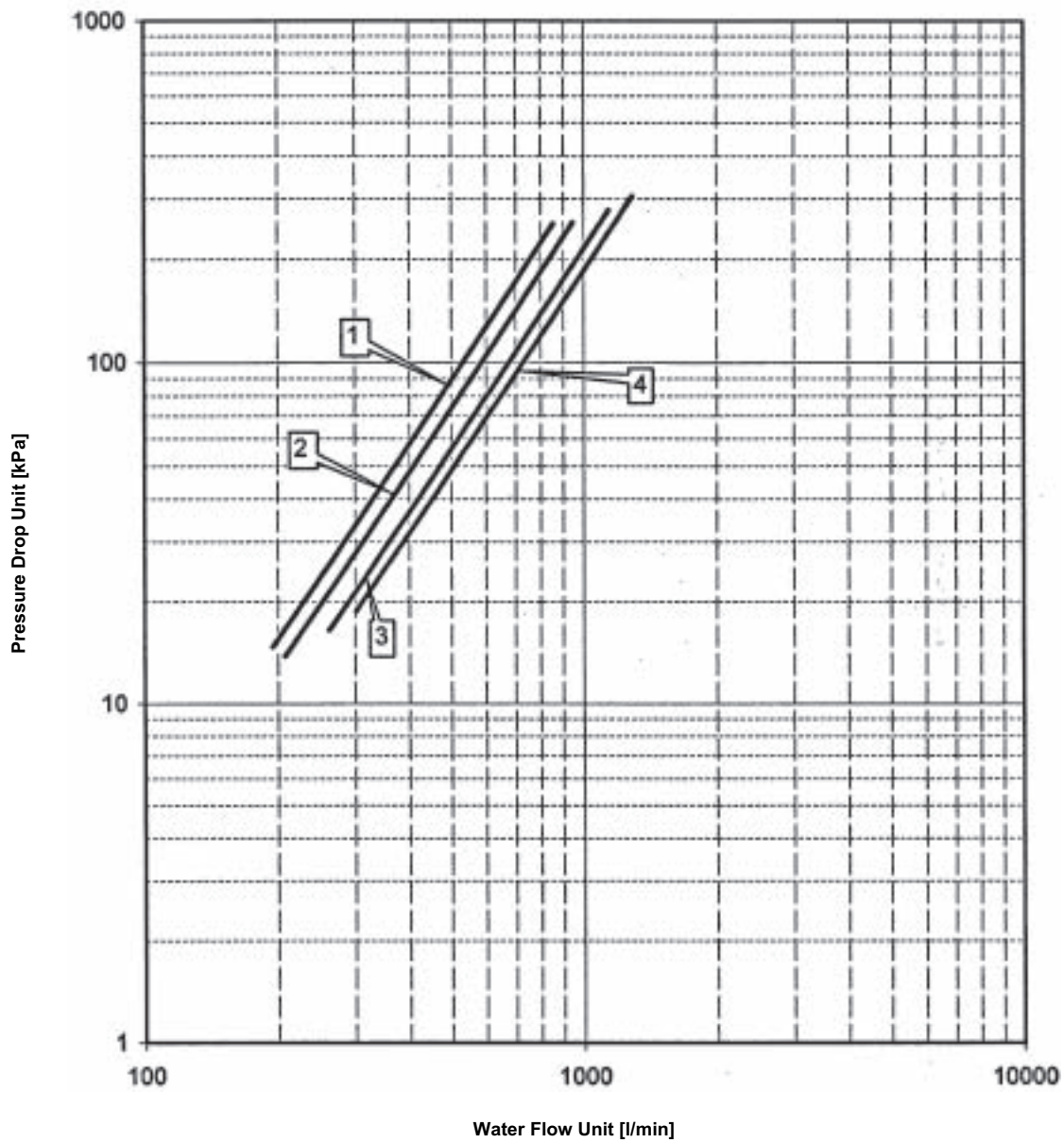
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57659-7

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ130-210DAYN(N)



1. EWYQ130DAYN* Standard model
2. EWYQ150DAYN* Standard model
3. EWYQ180DAYN* Standard model
4. EWYQ210DAYN* Standard model

Warning:

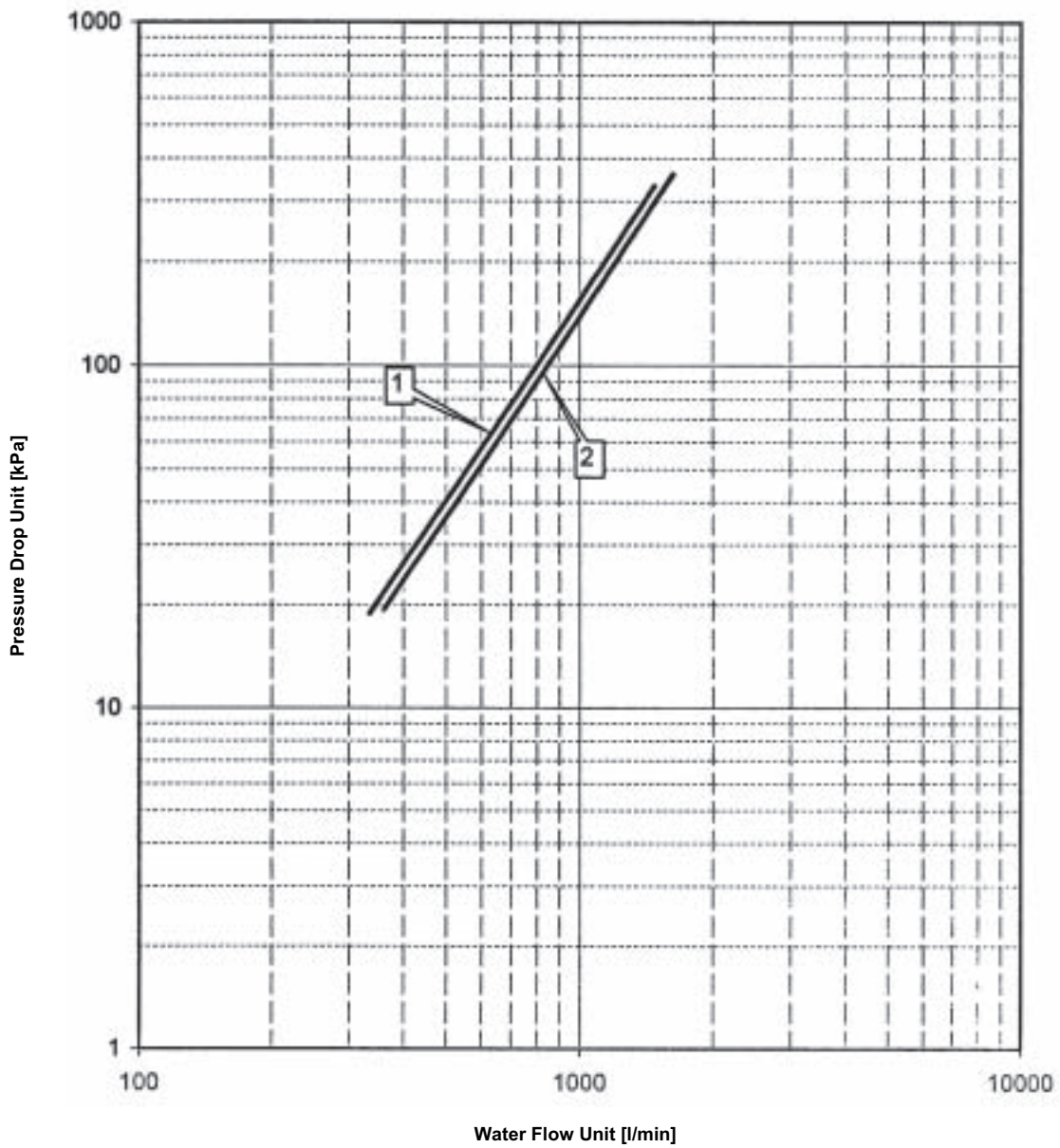
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57679-7

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ230-250DAYN(N)



- 1. EWYQ230DAYN* Standard model
- 2. EWYQ250DAYN* Standard model

Warning:

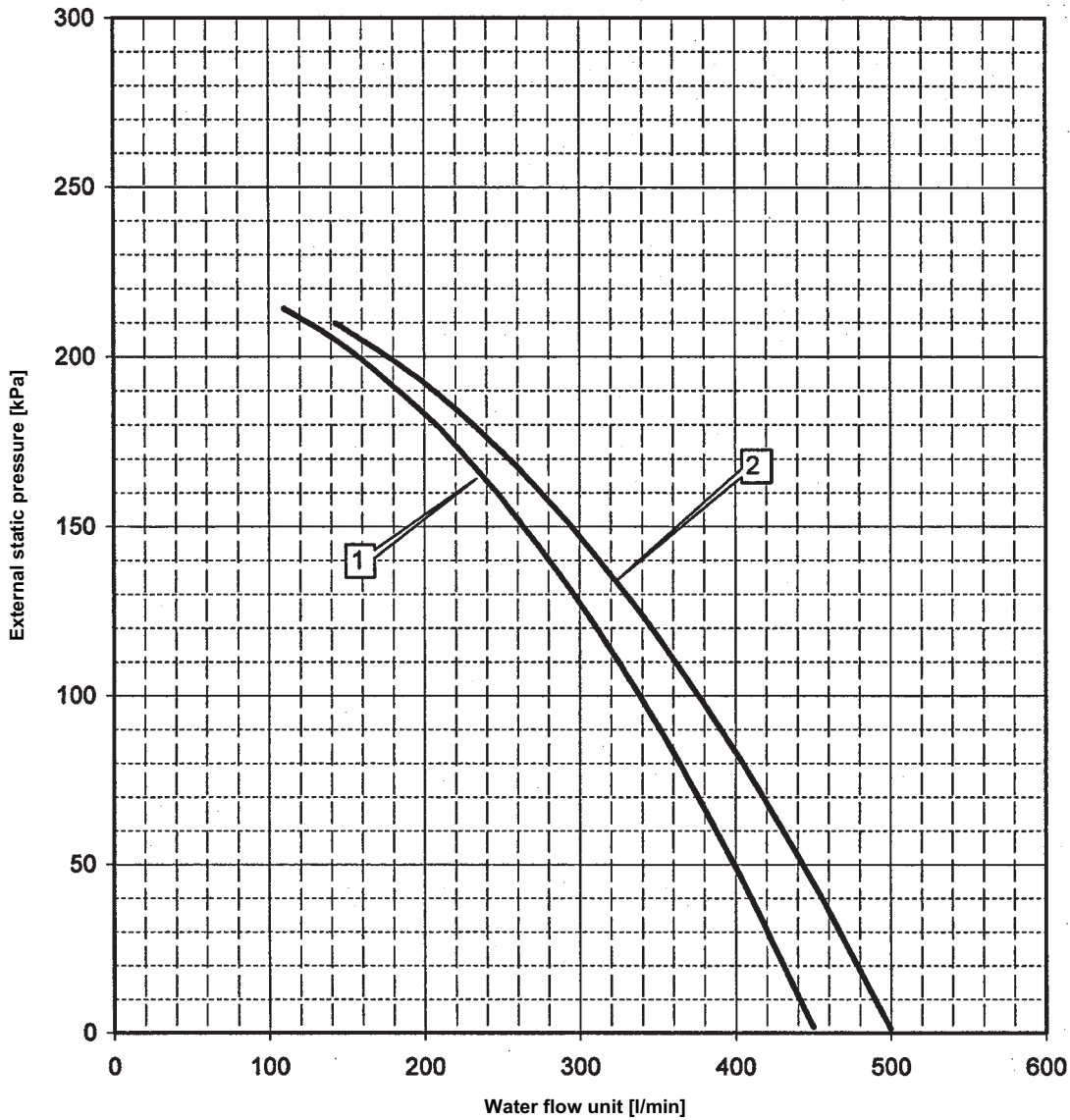
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57719-7

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ080-100DAYN(P-B)



- 1. EWAQ080DAYN* + OPSP
- 2. EWAQ100DAYN* + OPSP

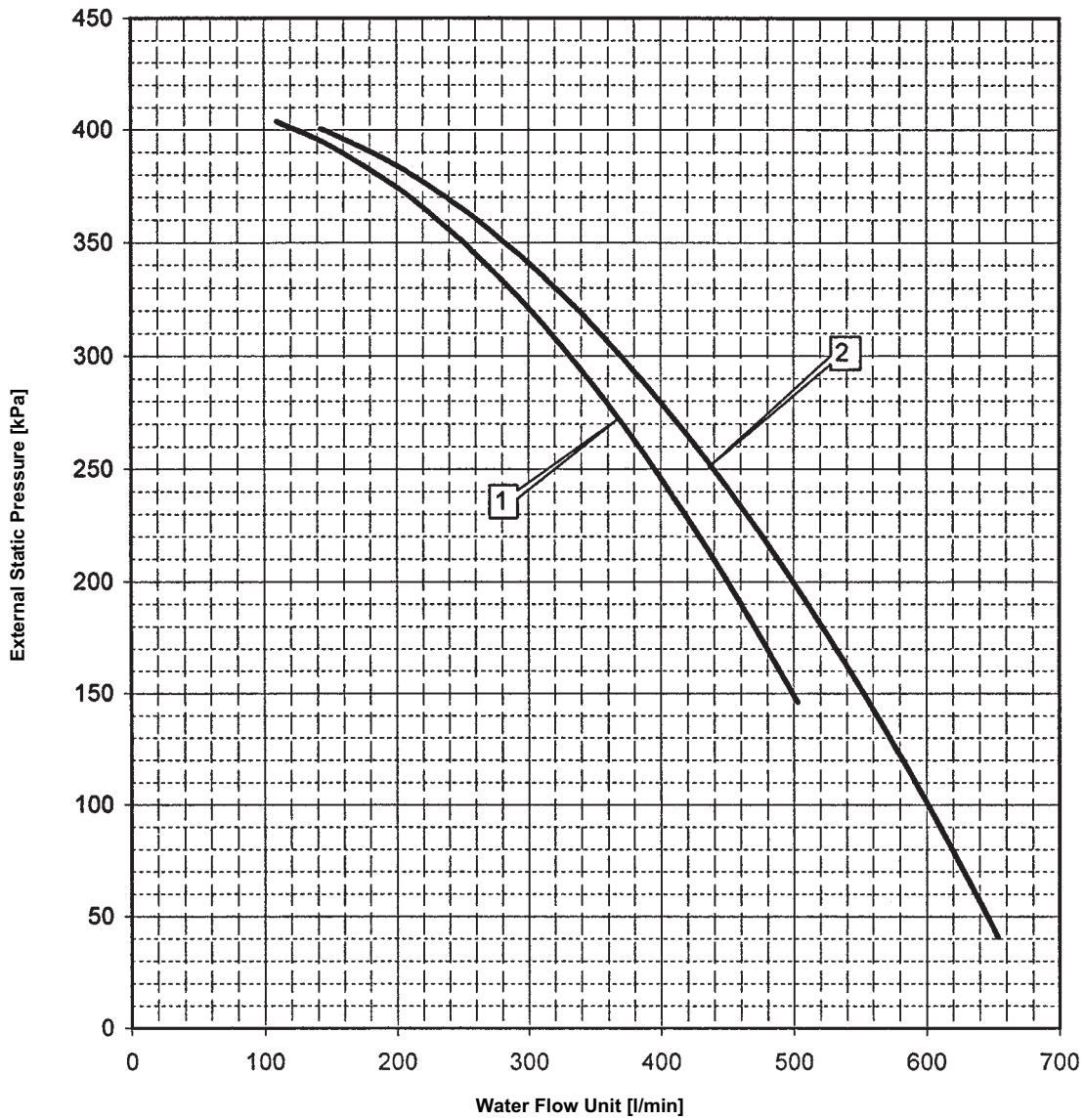
Warning:
 Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57659-4

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ080-100DAYN(OPHP)



- 1. EWYQ080DAYN* + OPHP
- 2. EWYQ100DAYN* + OPHP

Warning:

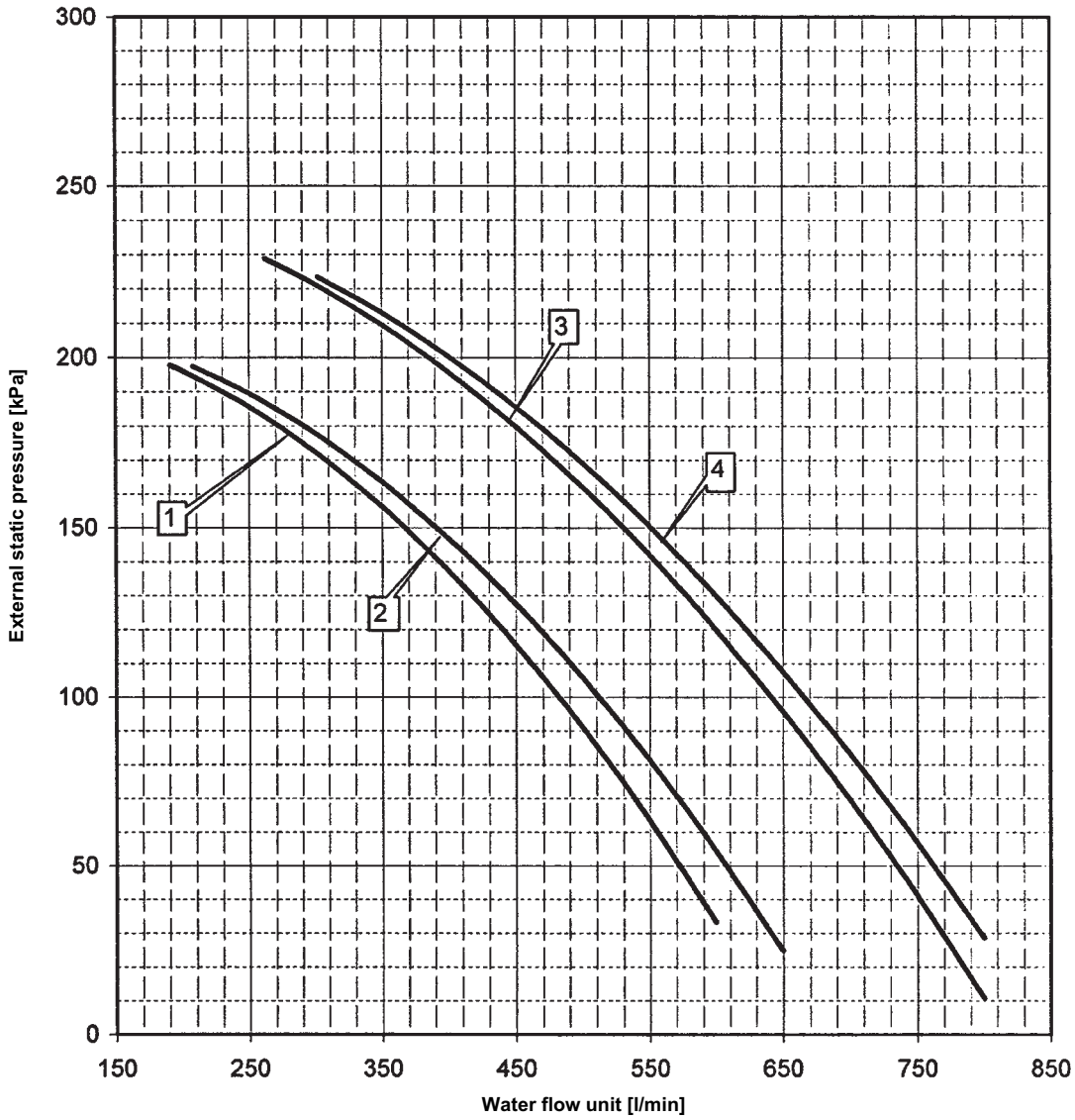
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57659-9

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ130-210DAYN(P-B)



- 1. EWYQ130DAYN* + OPSP
- 2. EWYQ150DAYN* + OPSP
- 3. EWYQ180DAYN* + OPSP
- 4. EWYQ210DAYN* + OPSP

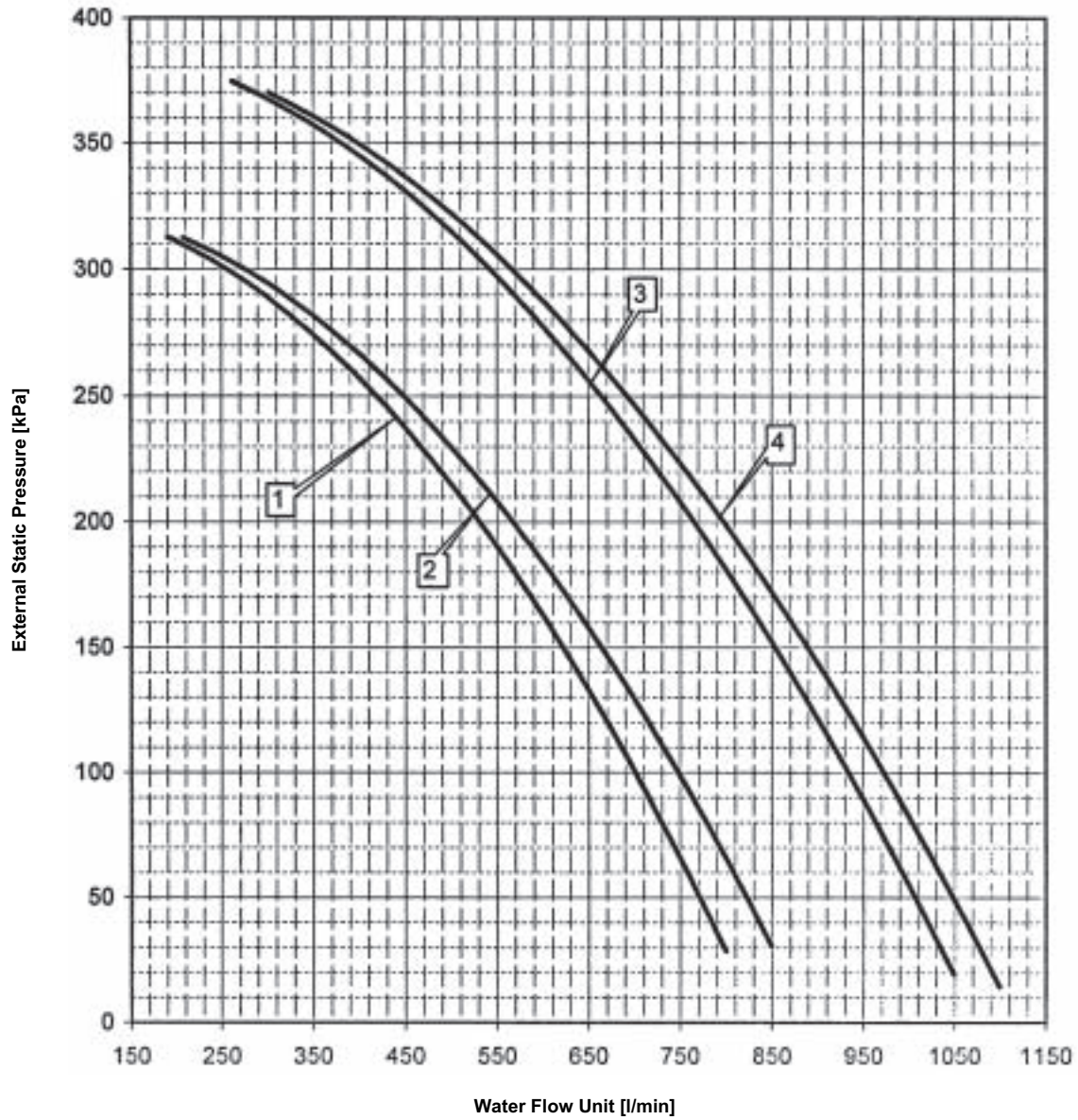
Warning:
 Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57679-4

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ130-210DAYN (OPHP)



- 1. EWYQ130DAYN* + OPHP
- 2. EWYQ150DAYN* + OPHP
- 3. EWYQ180DAYN* + OPHP
- 4. EWYQ210DAYN* + OPHP

Warning:

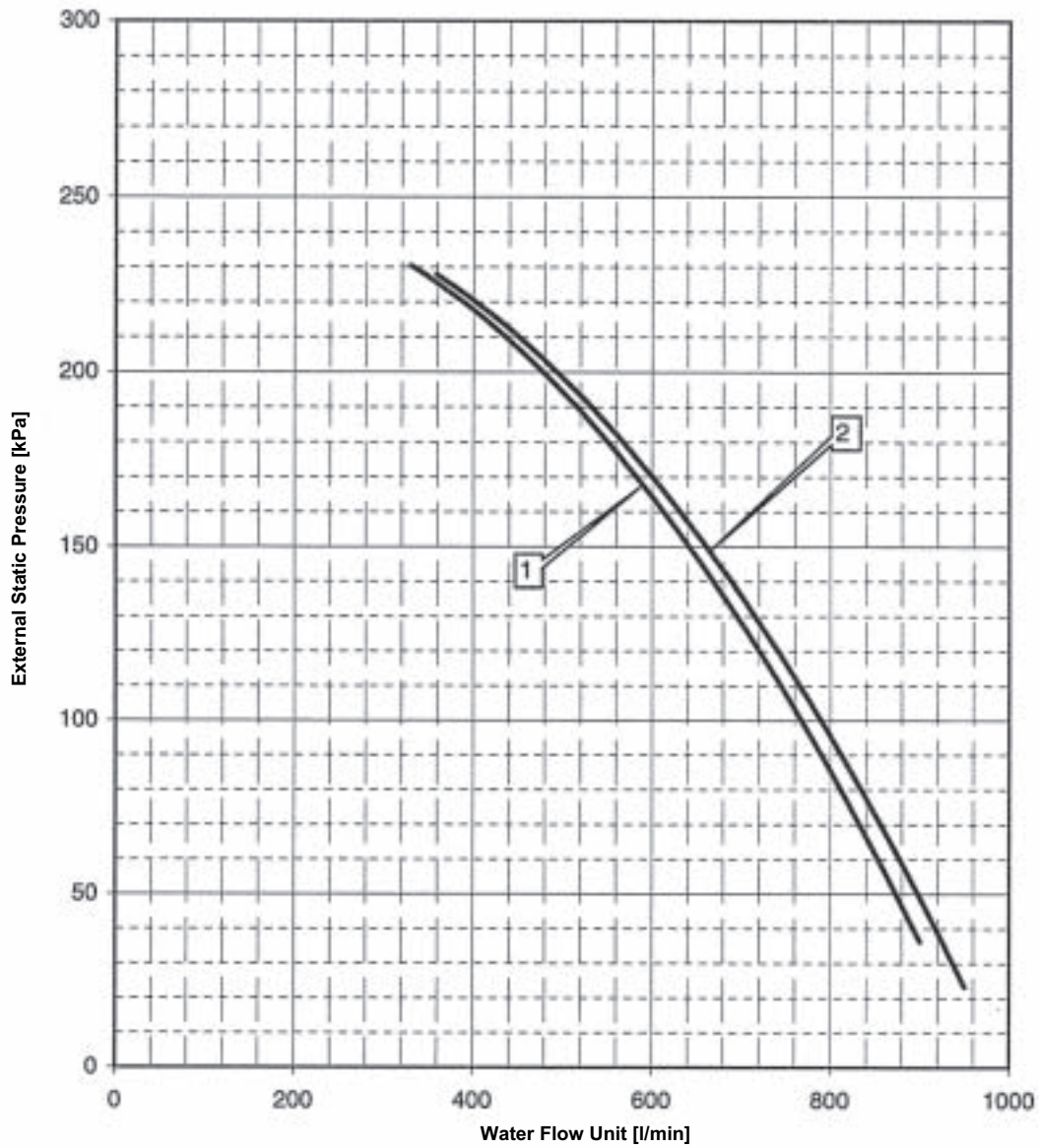
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57679-9

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ230-250DAYN(OPSP)



- 1. EWAQ230DAYN* + OPSP
- 2. EWAQ250DAYN* + OPSP

Warning:

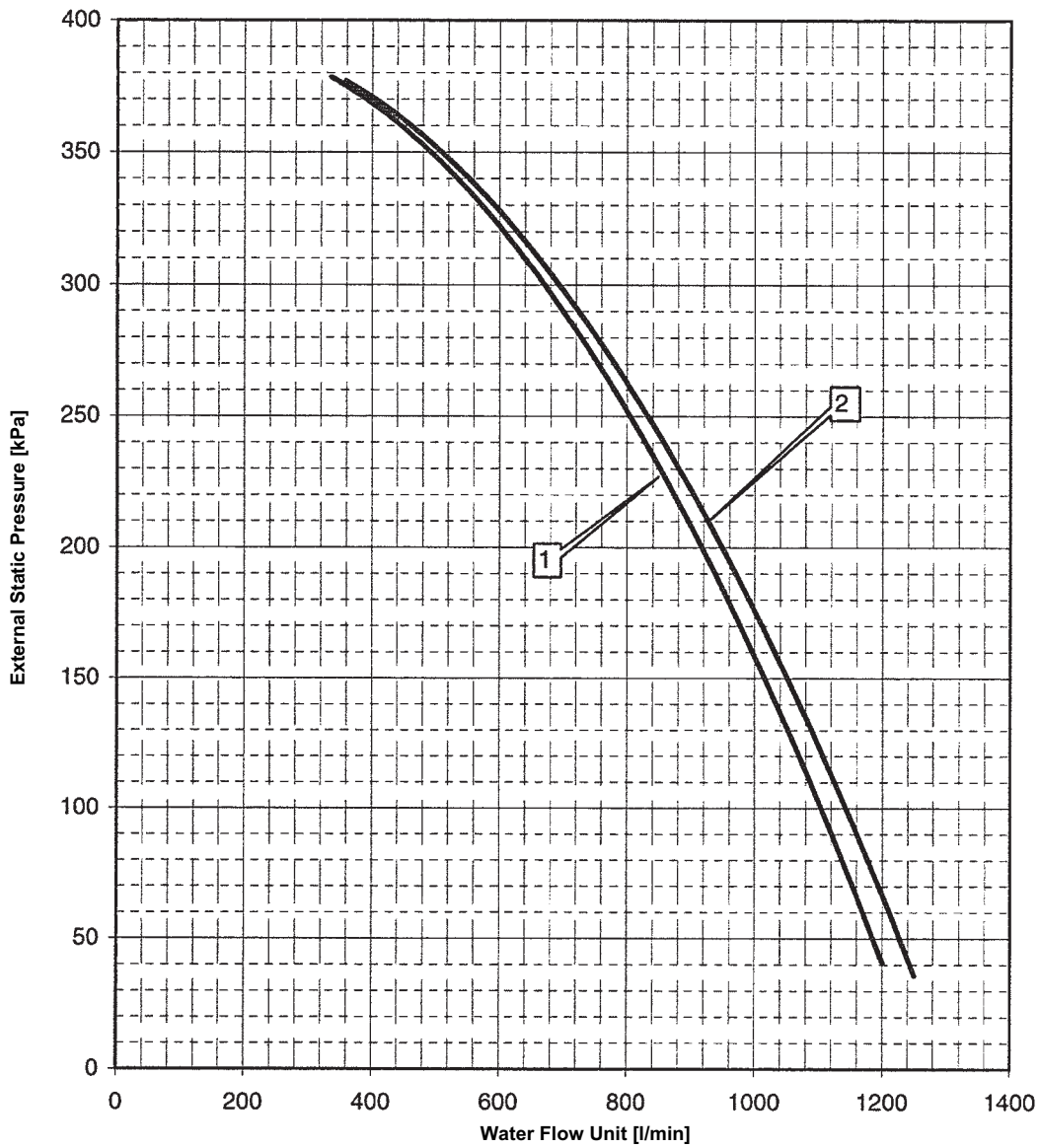
Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57719-4A

12 Hydraulic performance

12 - 2 Static pressure drop unit

EWYQ230-250DAYN(OPHP)



- 1. EWYQ230DAYN* + OPHP
- 2. EWYQ250DAYN* + OPHP

Warning:

Selecting a flow outside the curves can cause damage to or malfunction of the unit. See also minimum and maximum allowed water flowrange in the technical specifications.

4TW57719-9A