

CHILLER SELECTION SUMMARY

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INITIAL REQUIREMENTS

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Chosen chiller group: EUWL(\*)  
Type of chiller: WATER-REFRIGERANT  
Required COOLING CAPACITY: 370.0 KW  
Glycol Weight: 0%  
EVAPORATOR leaving temp.: 7.0 °C.  
EVAPORATOR entering temp.: 12.0 °C.  
CONDENSING temperature: 38.0 °C.  
Number of units wanted: 1

SUGGESTED CONFIGURATION

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Chiller Type1: 1 x EUWLM 120F  
COOLING cap. for chiller Type1: 1 x 376.9 KW  
Total COOLING capacity: 376.9 KW  
Total INPUT power: 85.8 KW  
Energy Efficiency Ratio E.E.R: 4.39 KW/KW  
Deviation from ideal requirement: +1.9 %

All calculations were made on CHILLER SELECTION software Version 2.6



BASIC DATA  
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COOLING cap. for given temp: 376.9 KW  
HEATING cap. for given temp: 462.8 KW  
INPUT power for given temp: 85.8 KW  
Capacity STEPS (%): 100-75-50-25-0  
EVAPORATOR Water Flow Rate: 1081.00 l/min  
EVAPORATOR pressure drop: 7.08 mH<sub>2</sub>O  
Energy Efficiency Ratio E.E.R: 4.39 KW/KW  
Coeffic. Of Performance C.O.P: 5.39 KW/KW

COMPRESSOR  
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Compressor TYPE: Semi-hermetic reciprocating  
Quantity x Model: 2x8H74WAE1  
Number of cylinders: 2x8  
Speed: 1450 rpm  
Oil Type: Suniso 3GSD  
Total oil charge volume: 2x8 l  
Crankcase Heater: 2x100 W

EVAPORATOR  
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Evaporator TYPE: Dry expans. shell+Hi-X U tubes  
Quantity x Model: 1xDEX300302C2PT  
Water Volume: 164 l  
Water Flow Range: 300 - 1490 l/min  
Temperature operating range: -5 to 32 C  
Insulation Material: Polyethylene foam



REFRIGERANT CIRCUIT  
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Number of circuits: 2  
Refrigerant Control: Thermostatic expansion valve  
Refrigerant Type: R-22  
Refrigerant charge: Factory charged

SAFETY and FUNCTIONAL DEVICES  
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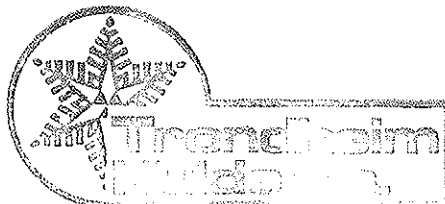
High pressure switch / low pressure switch / compressor motor  
thermal protector / compressor motor overcurrent relay / freeze-  
up protection thermostat / anti-recycling timer / electronic  
multi-step thermostat.

MISCELLANEOUS  
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Dimensions: 1117x3441x850 mm  
Machine Weight: 1560 kg  
Operation Weight: 1724 kg  
General sound level 1m dist.: 80 (dbA)  
Sound level at: 63 128 250 500 1000 2000 4000 8000 (Hz)  
Sound level: 63 68 76 77 72 69 73 68 (dbA)

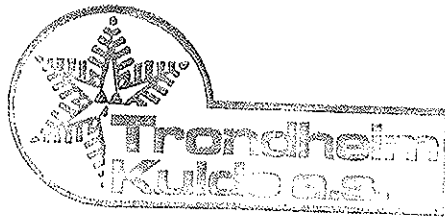
ELECTRICAL SPECIFICATIONS  
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	T1	Y1	
Phase:	3~	3~	
Frequency:	50	50	(Hz)
Voltage:	220	380-415	(V)
Nominal COOLING current:	284	170-174	(A)
Maximum RUNNING current:	440	246	(A)
Start current / compress:	365	215-236	(A)



OPTION LIST  
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- OP !: Option OP51 is standard on TUV approved chillers.
- OP04: Sightglass, drier, liquid solenoid + charge + stop valve.
- OP05: Press. relief-, stop-, solenoid- & charge valves, drier, sightglass
- OP10: Evaporator heatertype.
- OP11: High pressure setback + winter start facilities.
- OP51: Indication lamp for each safety device.
- OP52: Main isolator switch (type Y1 or type T1).
- OP53: Door switch (type Y1 or type T1).
- OP56: H-counter.
- OP57: A-meter, V-meter.
- OP58: Without thermostat.
- OP59: Terminals for GEA controller.
- ZH Glycol application for chilled water temperature down to -5°C.
- ZL Glycol application for chilled water temperature down to -10°C



# 1. SPECIFICATIONS

50Hz

TECHNICAL SPECIFICATIONS				
MODEL	EUWL * 25F	EUWL * 30F	EUWL * 40F	EUWL * 50F
NOMINAL CAPACITY cooling (1) [kW]	68.5	79.5	111.6	140.7
NOMINAL INPUT cooling (1) [kW]	21.1	22.9	32.2	43.4
CAPACITY STEPS [%]	100-50-0	100-67-33-0	100-67-33-0	100-75-50-25-0
MAIN COMPONENTS				
Compressor	Semi-hermetic reciprocating			
type	1x4H74TAE1	1x6H74FAE1	1x6H74TAE1	1x8H74OAE1
qty x model	4	6	6	8
no. of cylinders	1450	1450	1450	1450
speed [rpm]	SUNISO 3GSD	SUNISO 3GSD	SUNISO 3GSD	SUNISO 3GSD
oil type	5	8	8	8
oil charge volume [l]	100	100	100	100
crankcase heater [W]	Dry expansion shell and internal grooved, external finned tubes			
Evaporator	Dry expansion shell and internal grooved, external finned tubes			
type	1xDEX200.15.1C.1P.S	1xDEX200.15.1C.1P.S	1xDEX200.15.1C.1P.S	1xDEX250.18.1C.2P.ST
qty x model	38	38	46	72
water volume [l]	80-390	80-390	80-390	130-650
water flow range [l/min]	Polyethylene foam	Polyethylene foam	Polyethylene foam	Polyethylene foam
insulation material	1	1	1	1
Refrigerant circuit	Thermostatic expansion valve			
no. of circuits	R22	R22	R22	R22
refr. control	Filled with holding charge (N2)			
refr. type				
refr. charge [kg]				
DIMENSIONS				
HxWxD [mm]	940x1952x625	947x2025x549	925x2311 x 650	1022x2325x660
WEIGHT				
machine weight [kg]	455	490	580	780
operation weight [kg]	493	582	626	852
CASING	Switch box: polyester painted galvanised steel plate			
material	Ivory white / Munsell code 5Y7.5/1			
colour				
CONNECTIONS				
evaporator water in/out (2) [inch]	MBSP 3"	MBSP 3"	MBSP 2"	Flange 4"
evaporator water drain [inch]	NPTF 1/2"	NPTF 1/2"	NPTF 1/2"	NPTF 1/2"
refrigerant discharge outlet [inch]	1 3/8"	1 3/8"	1 3/8"	1 3/8"
refrigerant liquid inlet [inch]	7/8"	7/8"	7/8"	7/8"
SOUND LEVEL (3) [dB(A)]	76	77	78	79

50Hz

TECHNICAL SPECIFICATIONS				
MODEL	EUWL * 60F	EUWL * 80F	EUWL * 100F	EUWL * 120F
NOMINAL CAPACITY cooling (1) [kW]	162.1	237.1	304.4	356.7
NOMINAL INPUT cooling (1) [kW]	50.7	63.3	82.9	95.3
CAPACITY STEPS [%]	100-75-50-25-0	100-83-50-33-0	100-75-50-25-0	100-75-50-25-0
MAIN COMPONENTS				
Compressor	Semi-hermetic reciprocating			
type	1x8H74WAE1	2x6H74TAE1	2x8H74OAE1	2x8H74WAE1
qty x model	8	2x6	2x8	2x8
no. of cylinders	1450	1450	1450	1450
speed [rpm]	SUNISO 3GSD	SUNISO 3GSD	SUNISO 3GSD	SUNISO 3GSD
oil type	8	2x8	2x8	2x8
oil charge volume [l]	150	150	2x100	2x100
crankcase heater [W]	Dry expansion shell and internal grooved, external finned tubes			
Evaporator	Dry expansion shell and internal grooved, external finned tubes			
type	1xDEX260.24.1C.2P.ST	1xDEX300.24.2C.2PT	1xDEX300.30.2C.2PT	1xDEX300.30.2C.2PT
qty x model	97	132	164	164
water volume [l]	130-650	300-1490	300-1490	300-1490
water flow range [l/min]	Polyethylene foam	Polyethylene foam	Polyethylene foam	Polyethylene foam
insulation material	1	2	2	2
Refrigerant circuit	Thermostatic expansion valve			
no. of circuits	R22	R22	R22	R22
refr. control	Filled with holding charge (N2)			
refr. type				
refr. charge [kg]				
DIMENSIONS				
HxWxD [mm]	1022x2882x660	1140x3314x750	1117x3441x850	1117x3441x850
WEIGHT				
machine weight [kg]	810	1290	1540	1560
operation weight [kg]	907	1422	1704	1724
CASING	Switch box: polyester painted galvanised steel plate			
material	Ivory white / Munsell code 5Y7.5/1			
colour				
CONNECTIONS				
evaporator water in/out (2) [inch]	Flange 4"	Flange DN150-PN16	Flange DN150-PN16	Flange DN150-PN16
evaporator water drain [inch]	NPTF 1/2"	NPTF 1/2"	NPTF 1/2"	NPTF 1/2"
refrigerant discharge outlet [inch]	1 3/8"	1 3/8"	1 3/8"	1 3/8"
refrigerant liquid inlet [inch]	7/8"	7/8"	7/8"	7/8"
SOUND LEVEL (3) [dB(A)]	80	78	79	80