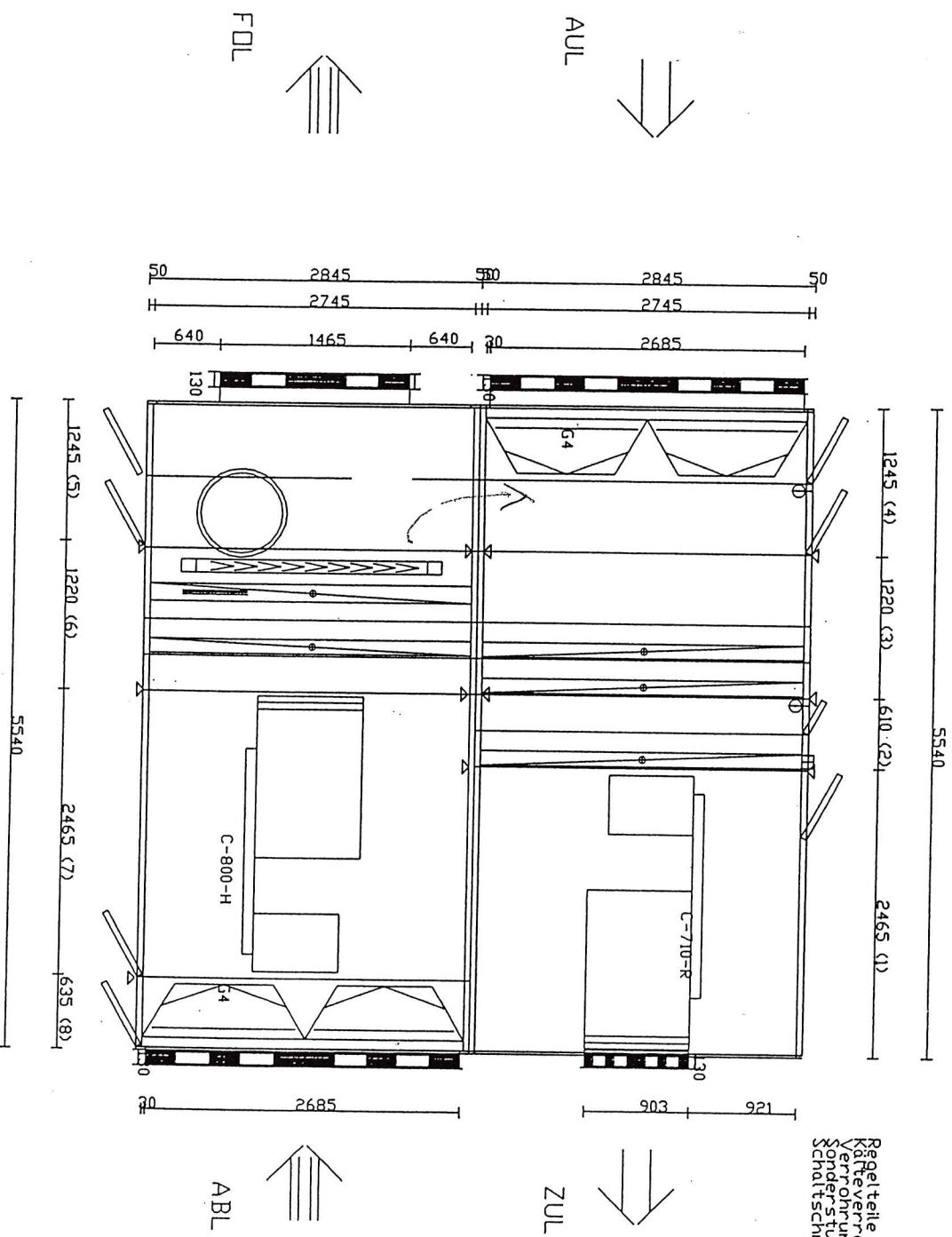


Regelteile für GFR - Regelung !!
 Kälteverrohrung soweit als möglich vorfertigen
 Verrohrung WRG. soweit als möglich vorfertigen
 Sonderstützen für Fortluft (1465 x 1465)
 Schaltschrank Teil 9



☒ Main switch ☒ Electric ☒ Light switch ☒ Test point ☒ Opening, general ☒ Differential pressure ☒ Gauge thermometer ☒ Contact manometer ☒ U-tube manometer ☒ Tube manometer	☒ dp ☒ dp ☒ Thermometer ☒ Drain tray heater ☒ Frost protection heating ☒ Trap ☒ Mixing valve ☒ Actuator ☒ Break point ☒ Internal components	Transport section-Weight (kg) 1 1420 4 660 7 1510 2 410 5 710 8 380 3 750 6 700	Overall accessories 401 kg General 6137 kg	GEA FAM35IBBL Project Plant Prowent-Cloasenowa Customer	Horizontal/ Side-by-side Offer-Position Order No. 364001-0010 Order number factory 466355-0010	Quantity 1	Top view Internal staff User-AC Hirandner Josef	1 : 60
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Geschäftsbereich
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Prowent-Cbasenowa

GEA no. 466355/0010

Type FAM35 IBBL

01 01 0001 GEA Fricostar 1 pcs.

FAM35IBBL

Swimming pool dehumidification unit with
heat pump circuit and heat recovery via
GEA ECOFLOW

Mixing air unit indoor application

Unit FAM35000
Arrangement Side-by-side

fresh air

Share 30 %
Temperature 5.0 °C
Humidity 85 %

supply air

Air volume flow m³/h 35000

Pool water condenser

swimming pool temperature °C 30
swimming pool humidity % 55

Overview capacity calculation FRICOSTAR

Dehumidification capacities

Heat recovery g/kg 0.0

Dehumidification power totg/kg 4.6

Dehumidification cap. totakg/h 193.0

Dehumidification acc. to Vkg/h08 222.6

Dehumidification

pool operation kg/h 193.0

Rest operation kg/h 65.2

heating capacities

condensor total Qc kW 110.8

Qo (heat recovery) kW 117.3

Betrieb gesamt kW 228.0

Data for post heater
air

press. drop Pa 52

air inlet temp. °C 23.2

rel. hum. - inlet % 43

air outlet temp. °C 37.6

rel. hum. - outlet % 19

total power kW 169

medium flow temp. °C 50.0

medium return temp. °C 40.0

medium volume flow m³/h 14.7



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Prowent-Chasenowa

GEA no. 466355/0010

Type FAM35 IBBL

Off

press. drop kPa 8.2

compressor max. power/max. current kW/A 29.2
Power/current input kW/A 18.1

fans fan type THL2710
air volume flow m³/h 3500
tot. ext. press. Pa 400
efficiency % 75
shaft power kW 10.79
Wave stand by operation kW 10.89
nozzle pd Pa 264
SFP kW/m³/s 2.34

motor rated power kW 16/5.5
Pm (BP) kW 12/3.7
rated speed l/ 1450/960
absorbed current A 31/12
winding protection PTC thermostat 103/95
Sound power total dB/DB(A) 105/100

Total value Total power kW 46.08
Nominal current A 86.86
operation voltage 3x400V/N/PE/50Hz

SUPPLY

01 01 0001 01 STW2B 1 Pcs.

END WALL WITH CONNECTION OVER FULL CROSS
SECTION

01 01 0001 04 FTT1 1 Pcs.

FILTER

filtration class, EN G4
efficiency EM % 0.00
efficiency efficiency AM % 92.20
filter medium synthetic fibre
filter area m² 20.3
filter length mm 360
initial pd Pa 34
recommended final pd Pa 200
selection pd Pa 117
max. operating temp. °C 80.0
max. operating hum. % 100
filter size 1 mm 305
number of cells -
filter size 2 mm 610
number of cells -
filter size 3 mm 305
number of cells -
filter size 4 mm 610
number of cells -
filter size 4 mm 2
number of cells -
number of cells 0



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Prowent-Chasenowa

GFA no. 466355/0010

Type FAM35 IBL

01 01 0001 06 AKUB72

RECIRCULATION AIR SECTION

01 01 0001 08 LE001

DUMMY SECTION WITHOUT DOOR

01 01 0001 09 EEEAI

HEAT RECOVERY ECOFLOW

regenerative heat recovery

with GEA heat exchanger

heat exchanger

tube application

finned tube system

number of rows

number of circuits

connections

inlet / outlet each

air volume flow

press. drop

water-glycol

glycol content

medium volume flow

press. drop

max. operating temp.

max. operat. press.

max. operating temp.

CONDENSOR SECTION

plenum with finned heat exchanger

finned tube system

connections

air

press. drop

refrigerant

type of refrigerant

press. drop

max. operat. press.

max. operating temp.

RECIRCULATION AIR SECTION

1 pcs.

01 01 0001 11 AKUB71

HEATER SECTION

plenum with finned heat exchanger

finned tube system

connections

water content

inlet / outlet each

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

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SD211/100

heat exchanger

finned tube system

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number of circuits

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SD211/100

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SD211/100

heat exchanger

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SD211/100

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SD211/100

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SD211/100

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external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100

heat exchanger

external

1 x 65

water content

1

SD211/100

heat exchanger

finned tube system

connections

number of circuits

number of rows

finned tube system

SD211/100



Geschäftsbereich
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Prowent-Chasenowa

GFA no. 466355/0010

Type FAM35 IBL
Off 1

air
air volume flow m³/h 35000
press. drop Pa 53
air inlet temp. °C 23.2
rel. hum. - inlet % 43
inlet wet bulb temp. °C 15.3
air outlet temp. °C 37.6
rel. hum. - outlet % 19
outlet wet bulb temp. °C 20.1
total power kW 169

Water
glycol content % 0
medium flow temp. °C 50.0
medium return temp. °C 40.0
medium volume flow m³/h 14.7
flow speed m/s 0.864
press. drop kPa 9.1
max. operating temp. °C 110
max. operat. press. bar 16.0

01 01 0001 16 VKL 0A 1 Pcs.

FAN UNIT - SUPPLY

Centrifugal fan with casing

fan
fan type THLZ710-AHJ
manufacturer Comefit
impeller type backward curved
air volume flow m³/h 35000
reference temp. °C 20
tot. ext. press. Pa 400
unit press. drop Pa 258
fan section pd Pa 92
dynamic pressure Pa 87
tot. operation press. Pa 837
fan speed 1/min 1273
efficiency % 75
shaft power kW 10.79
min. motor power kW 12.09
SFP kW/m³/s 1.27
max. speed 1/min 1300
max. shaft power kW 12.5
Sound spectrum of sound power at fan
Freq. Intake Discharge

63 Hz 94/ 68 98/ 72 dB/dB(A)
125 Hz 95/ 79 97/ 81 dB/dB(A)
250 Hz 94/ 85 95/ 86 dB/dB(A)
500 Hz 91/ 88 92/ 89 dB/dB(A)
1000 Hz 93/ 93 94/ 94 dB/dB(A)
2000 Hz 88/ 89 89/ 90 dB/dB(A)
4000 Hz 86/ 87 87/ 88 dB/dB(A)
8000 Hz 78/ 77 79/ 78 dB/dB(A)
total 101/ 96 103/ 97 dB/dB(A)

motor



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Prowent-Cbasenowa

GFA no. 466355/0010

Type FAM35 IBL

rated power 5.50 16.0 kW
rated speed 960 1450 1/min
number of poles 6 4
winding circuit Y Y
type of winding separate windings
voltage/frequency 3x400/50 V/Hz
absorbed current 12.0 31.0 A
starting current 45.6 164 A
starting time 5.0 3.5 s
max. starting time 34 37 s
enclosure IP 55
iso-class F
construction B3
size 180M
winding protection PTC thermostat 120 kg
weight

drive
belt type SPA
belt length 2382
number of grooves 3
centres distance 908 mm
fan shaft diameter 50 mm
fan pulley diameter 190 mm
fan bush 2517
motor shaft diameter 48 mm
motor pulley dia. 170 mm
motor bush 2517
actual speed 1297 1/min
sound spectrum of sound power at unit
Break-out
Unit
Frequency Intake/Discharge thro' casing

EXHAUST
63 Hz 94/ 68 98/ 72 77/ 51 dB/DB(A)
125 Hz 95/ 79 97/ 81 76/ 60 dB/DB(A)
250 Hz 94/ 85 95/ 86 63/ 54 dB/DB(A)
500 Hz 91/ 88 92/ 89 47/ 44 dB/DB(A)
1000 Hz 93/ 93 94/ 94 45/ 45 dB/DB(A)
2000 Hz 88/ 89 89/ 90 36/ 37 dB/DB(A)
4000 Hz 86/ 87 87/ 88 31/ 32 dB/DB(A)
8000 Hz 78/ 77 79/ 78 23/ 22 dB/DB(A)
total 101/ 96 103/ 97 80/ 62 dB/DB(A)

01 01 0001 18 STW2S

1 Pcs.

END WALL WITH CONNECTION OVER FULL CROSS
SECTION

01 01 0001 20 FIT2

1 Pcs.

FILTER

filtration class, EN G4
efficiency EM %
efficiency AM % 92.20
filter medium synthetic fibre
filter area m² 20.3
filter length mm 360
initial pd Pa 36



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Prowent-Chasenowa

GEA no. 466355/0010

Type FAM35 IBBL

recommended final pd Pa 200
selection pd Pa 118
max. operating temp. °C 80.0
max. operating hum. % 100
filter size 1 mm 305
number of cells 1
filter size 2 mm 610
number of cells 2
filter size 3 mm 305
number of cells 3
filter size 4 mm 610
number of cells 4
number of cells 0

01 01 0001 22 VKL_0B 1 Pcs.

FAN_UNIT - RETURN

Centrifugal fan with casing

fan type HLZ800T-AHJ
fan manufacture Cometril
impeller type backward curved
air volume flow m³/h 36400
reference temp. °C 20
tot. ext. press. Pa 400
unit press. drop Pa 195
fan section pd Pa 67
dynamic pressure Pa 59
tot. operation press. Pa 721
fan speed 1/min 1003
efficiency % 73
shaft power kW 9.99
min. motor power kW 11.48
SFP kW/m³/s 1.13
max. speed 1/min 1650
max. shaft power kW 45.0

Sound spectrum of sound power at fan
Discharge Intake Freq.

63 Hz	91/ 65	97/ 71	96/ 80	92/ 83	89/ 86	87/ 87	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)
125 Hz	94/ 78	96/ 80	92/ 83	89/ 86	87/ 87	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)	
250 Hz	92/ 83	92/ 83	89/ 86	87/ 87	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)		
500 Hz	89/ 86	87/ 87	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)				
1000 Hz	87/ 87	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)					
2000 Hz	81/ 82	79/ 80	65/ 64	101/ 92	dB/DB(A)						
4000 Hz	79/ 80	65/ 64	101/ 92	dB/DB(A)							
8000 Hz	65/ 64	101/ 92	dB/DB(A)								
total	98/ 92	101/ 92	92	98/ 92	101/ 92	92	98/ 92	101/ 92	92	98/ 92	dB/DB(A)

motor
rated power kW 3.70 12.0
rated speed 1/min 980 1470
number of poles - 6 4
winding circuit Y Y
type of winding separate windings
voltage/frequency V/Hz 3x400/50
absorbed current A 9.30 23.3
starting current A 53.0 189
starting time s 7.6 4.0
max. starting time s 10 6



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Provent-Cbasenowa

GFA no. 466355/0010

Type FAM35 IBL

Off

enclosure
iso-class
construction
size
winding protection
weight
kg
PTC thermistor
93

drive

belt type
SPA

belt length
2682

number of grooves
3

centres distance
1074

fan shaft diameter
mm
60

fan pulley diameter
mm
200

fan bush
2517

motor shaft diameter
mm
42

motor pulley dia.
mm
140

motor bush
2517

actual speed
1/min
1029

Sound spectrum of sound power at unit

Unit
Break-out

ency
Intake/Discharge thro' casing

63 Hz 91/ 65 97/ 71 76/ 50 dB/DB (A)

125 Hz 94/ 78 96/ 80 75/ 59 dB/DB (A)

250 Hz 92/ 83 92/ 83 60/ 51 dB/DB (A)

500 Hz 89/ 86 89/ 86 44/ 41 dB/DB (A)

1000 Hz 87/ 87 87/ 87 38/ 38 dB/DB (A)

2000 Hz 81/ 82 81/ 82 28/ 29 dB/DB (A)

4000 Hz 79/ 80 79/ 80 23/ 24 dB/DB (A)

8000 Hz 65/ 64 65/ 64 <20/<20 dB/DB (A)

total 98/ 92 101/ 92 79/ 60 dB/DB (A)

01 01 0001 23 LE002

1 pcs.

DUMMY SECTION WITHOUT DOOR

01 01 0001 24 EEKAI

1 pcs.

HEAT RECOVERY ECOFLOW

regenerative heat recovery

with GFA heat exchanger

total power

kW

116.3

Airflow

heat exchanger

tube application

Cu

finned tube system

SD251

number of rows

12

number of circuits

12

connections

intern

inlet / outlet each

DN

air volume flow

m³/h

35000

press. drop

Pa

260

water-glycol

glycol content

%

25

air

35382

271



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Prowent-Chasenowa

GEA no. 466355/0010

Type FAM35 IBL

01 01 0001 26 KKVAI 1 Pcs.

DIRECT EVAPORATOR

plenum with heat exchanger

heat exchanger

finned tube system

connections

press. drop

Pa

53

refrigerant

type of refrigerant

R407C

01 01 0001 28 KOMPI 1 Pcs.

COMPRESSOR UNIT

manufacture

Compressor family

Copeland
Scroll Air Conditi

refrigerant

type of refrigerant

Mass flow refrigerant kg/h

0.6

motor

rated power

kW

18.1

voltage/frequency

V/Hz 380/420V - 3~

absorbed current

A

32.6

01 01 0001 29 IE003 1 Pcs.

DUMMY SECTION WITHOUT DOOR

DUMMY SECTION WITHOUT DOOR

01 01 0001 30 STW1B 1 Pcs.

ENDWALL WITH STANDARD CONNECTION

ENDWALL WITH STANDARD CONNECTION

01 01 0001 32 ZZLSSS 2 Pcs.

INCLINED DRAIN TRAP DN40, indoor

INCLINED DRAIN TRAP DN40, indoor

- max. 700 Pa low pressure