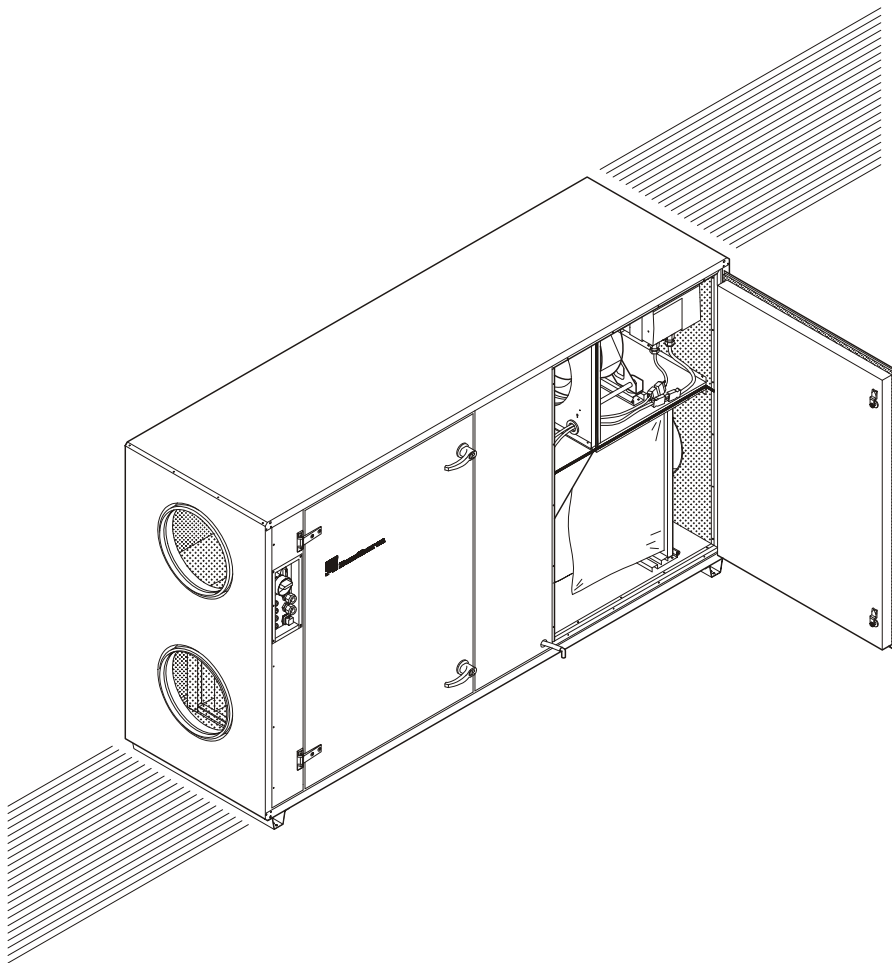


Vent C 6

Wiring Diagrams



No. 971772 • rev. 2.3 • 17.09.2008



Der tages forbehold for trykfejl og ændringer
Dantherm can accept no responsibility for possible errors and changes
Irrtümer und Änderungen vorbehalten
Dantherm n'assume aucune responsabilité pour erreurs et modifications éventuelles

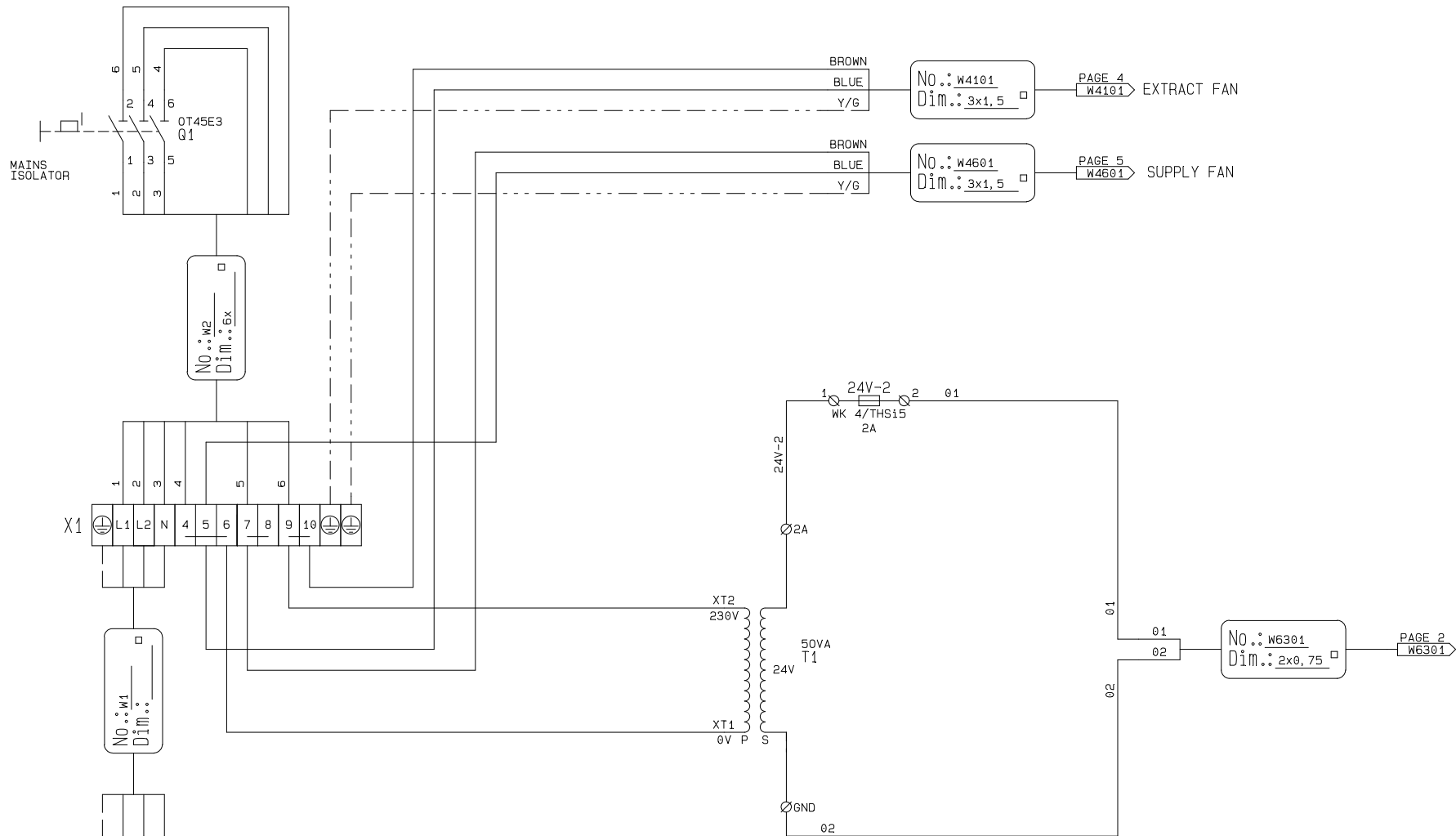
INDEX / INDHOLDSFORTEGNELSE / INHALTSVERZEICHNIS:

**1. INTERNAL CONNECTIONS IN THE UNIT / INTERNE FORBINDELSE I AGGREGAT /
INTERNE GERÄTEVERBINDUNGEN**

SUPPLY / FORSYNING / VERSORGUNGSSPANNUNG.....	1
COMPONENTS / KOMPONENTER / KOMPONENTEN.....	2
FAN MOTOR CONNECTIONS / MOTORTILSLUTNINGER / MOTORANSCHLUSS.....	3
PLUGS ON EXTRACT FAN / STIK PÅ UDSUGNINGS-MOTOR / STECKER FÜR ABLUFTVENTILATOR.....	4
PLUGS ON SUPPLY FAN / STIK PÅ INDBLÆSNINGS-MOTOR / STECKER FÜR ZULUFTVENTILATOR.....	5
MAINS CONNECTION / NETTILSLUTNING / NETZANSCHLUSS.....	6

2. OPTIONS / TILBEHØR / ZUBEHÖR

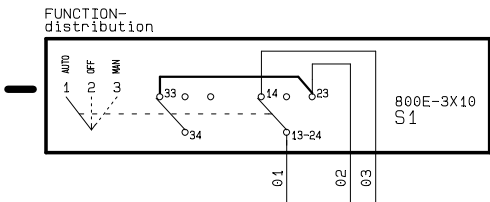
FIRE THERMOSTATS / BRANDTHERMOSTATER / BRANDTHERMOSTATE.....	7
FILTER GUARDS (MECHANICAL) / FILTERVAGTER (MEKANISKE) / FILTERWÄCHTER (MECHANISCH).....	8
SMOKE DETECTOR / RØG DETEKTOR / RAUCH DETEKTOR.....	9
DAMPER CONNECTIONS (ON/OFF) / SPJÆLDTILSLUTNING (ON/OFF) / KLAPPENANSCHLUSS (ON/OFF).....	10
DAMPER CONNECTIONS (MODULATED) / SPJÆLDTILSLUTNING (MODULERENDE) / KLAPPENANSCHLUSS (MODULIERT).....	11
FLOW GUARDS (MECHANICAL) / FLOWVAGTER (MEKANISKE) / FLOWWÄCHTER (MECHANISCH).....	12
REHEAT LPHW / EFTERVARME (VANDVARME) / NACHHEIZFLÄCHE WARMWASSER.....	13
REHEAT (ELECTRICAL) / EFTERVARME (EL-VARME) / NACHHEIZFLÄCHE (ELEKTRISCH).....	14
REHEAT (ELECTRICAL) / EFTERVARME (EL-VARME) / NACHHEIZFLÄCHE (ELEKTRISCH).....	15
HUMIDITY SENSOR / FUGTFØLER / FEUCHTEFÜHLER.....	16
CO ₂ SENSOR / CO ₂ SENSOR / CO ₂ FÜHLER.....	17
CONSTANT PRESSURE IN THE SUPPLY AIR DUCT (VAV) / KONSTANT TRYK I INDBLÆSNINGSKANAL (VAV) / KONSTANTER DRUCK IM ZULUFTKANAL (VAV).....	18
DISPLACEMENT OF TEMPERATURE SETPOINT / FORSKYNING AF TEMPERATURSETPUNKT VERSCHIEBUNG DES TEMPERATUR SETPUNKTES.....	19
EXTENDED OPERATION / FORLÆNGET DRIFT / VERLÄNGERTE BETRIEBSZEIT.....	20
MOTION OBSERVER / BEVÆGELSESFØLER / BEWEGUNGSFÜHLER.....	21
PREHEAT LPHW / FORVARME (VANDVARME) / VORHEIZFLÄCHE (WARMWASSER).....	22
PREHEAT (ELECTRICAL) / FORVARME (EL-VARME) / VORHEIZFLÄCHE (ELEKTRISCH).....	23
DX WATER COOLING COIL / DX VANDKØLEFLADE / DX KALTWASSER FLÄCHE.....	24
DX COIL (CAPACITY CONTROL) COMPRESSOR / DX KØLEFLADE (KAPACITETSREGULERING) KOMPRESSOR / DX KÜHLFLÄCHE (LEISTUNGSREGULIERUNG) KOMPRESSOR.....	25
DX COIL (STARTING SIGNAL) COMPRESSOR / KØLEFLADE (STARTSIGNAL) KOMPRESSOR / DX KÜHLFLÄCHE (START SIGNAL) KOMPRESSOR.....	26
RECUPERATOR DE-ICING / AFRIMNING AF VEKSLER / ABTAUUNG WÄRMETAUSCHER.....	27
RUN-FAULT VOLTFREE SIGNAL / DRIFT-FEJLSIGNAL / BETRIEB-STÖRUNG SIGNAL.....	28
FANS ON SIGNAL / VENTILATOR KØRER SIGNAL / VENTILATOREN AN SIGNAL.....	29
COMMUNICATION MODUL / KOMMUNIKATIONS MODUL / KOMMUNIKATIONS MODUL.....	30
CONNECTING CABLE / FORBINDELSKABEL / VERBINDUNGSKABEL.....	32
START SIGNAL TO PUMP FOR WATER COOLING COIL / STARTSIGNAL TIL PUMPE FOR VANDKØLEFLADE / STARTSIGNAL FÜR UMWÄLZPUMPE KALTWASSER.....	33
START SIGNAL TO PUMP FOR REHEATER LPHW / STARTSIGNAL TIL PUMPE FOR EFTERVARMEFLADE / STARTSIGNAL FÜR UMWÄLZPUMPE WARMWASSER.....	34



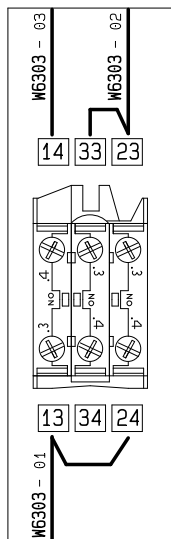
Voltage: 2N~400V
 Power: --kW
 Load: --A
 Max fuse: --A

VentC	1N~ PE 230V			2N~ PE 400V			3~ PE 230V			Conductor size [mm ²]
	Power [kW]	Load [A]	Fuse [A]	Power [kW]	Load [A]	Fuse [A]	Power [kW]	Load [A]	Fuse [A]	
6	3,0	23	25	3,0	12,0	16	3,0	20,0	25	4

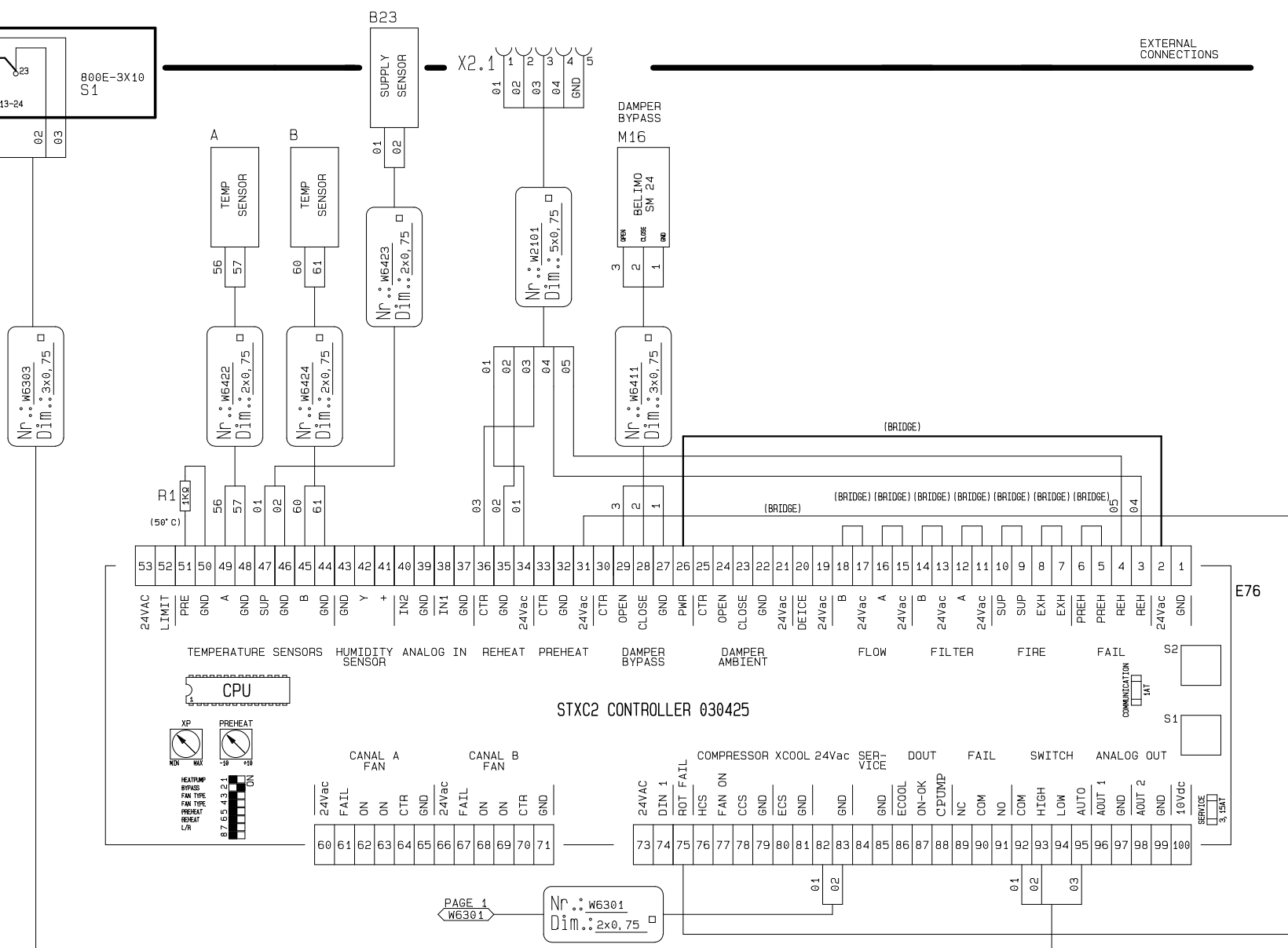
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37



Function switch
seen from behind.
Contact elements
type 800E-3X10
Allen-Bradly

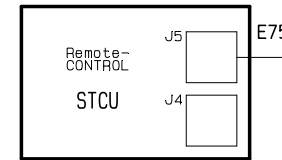
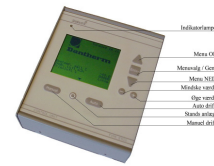


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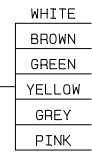
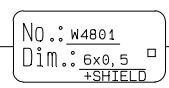
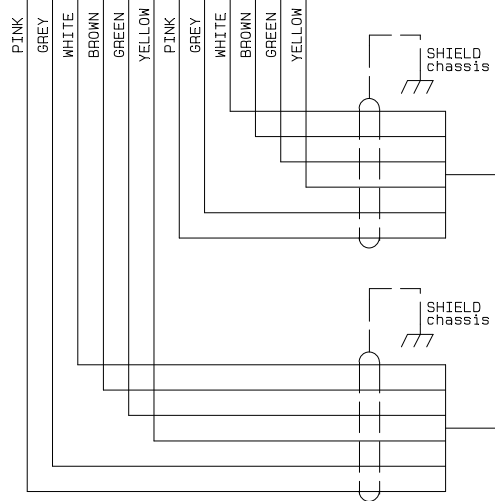
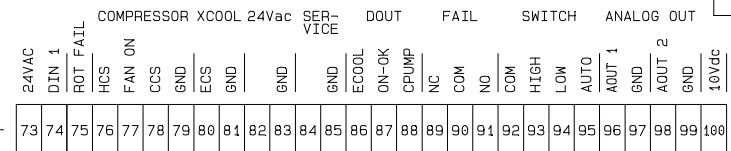
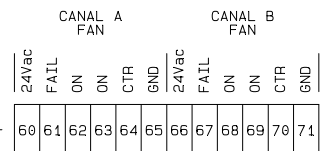
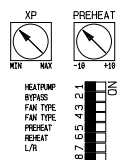
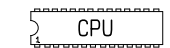
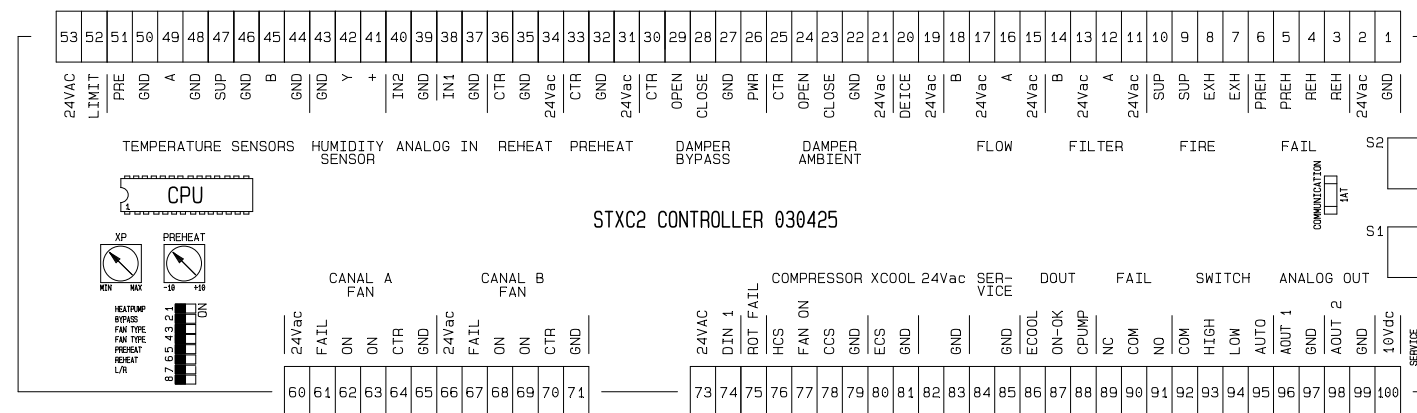


PAGE 1
M6301
Nr.: W6301
Dim.: 2x0,75

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	Item: INTERNAL CONNECTIONS IN THE UNIT - COMPONENTS		Page revision:	905306
	Project title: VentC 6		Printed: 02-06-2005	
	Designer:		Changed: 02-06-2005	Page: 2 of 34
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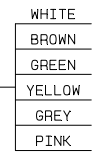
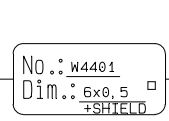


EXTERNAL CONNECTIONS



PAGE 5
W4801

SUPPLY FAN

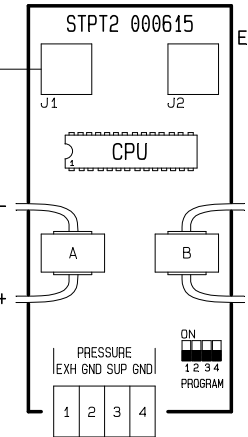
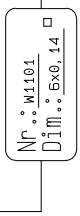
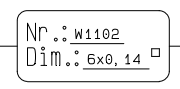


PAGE 4
W4401

EXTRACT FAN

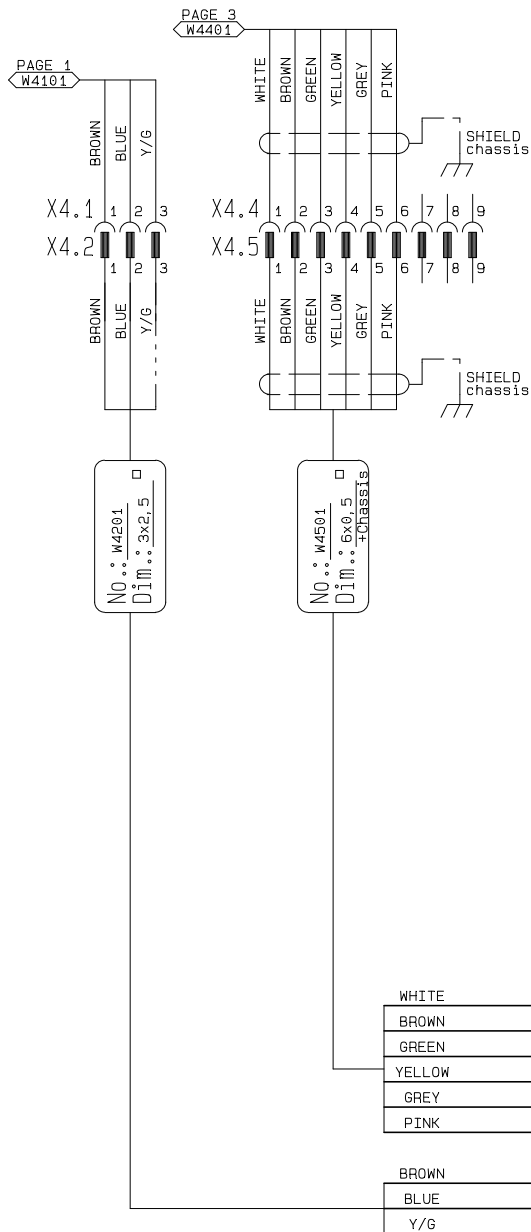


E76



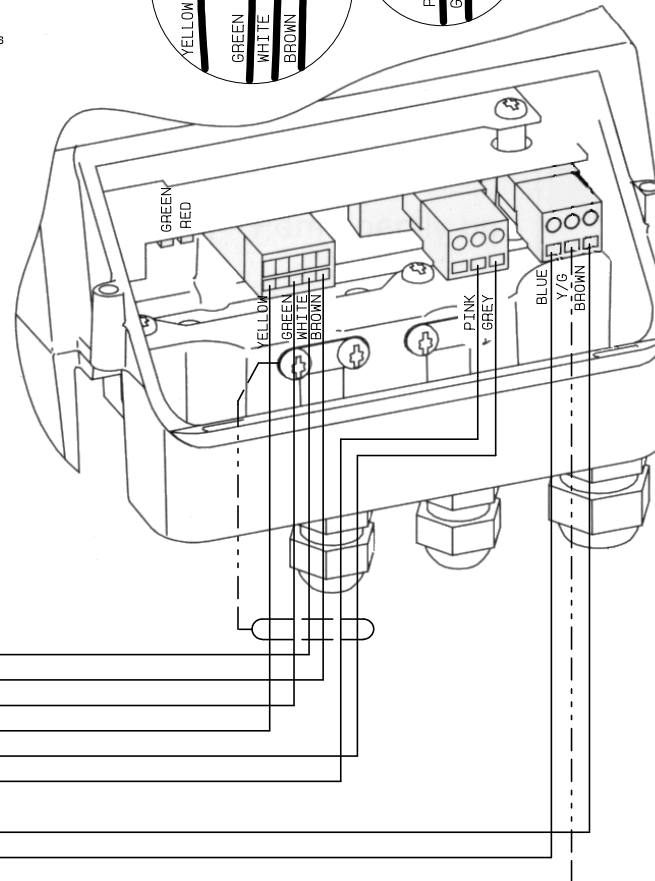
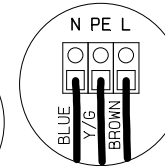
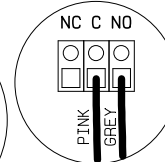
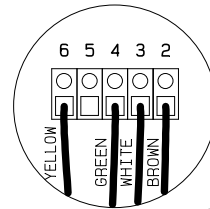
E77

A/S Dantherm Jagstrupvej 4, DK - 7800 Skive Tel. +45 97 52 41 44 Fax. +45 97 52 61 34	Customer: A/S DANTHERM	Customer ref.:	Revision:	Dantherm no.:
	Item: INTERNAL CONNECTIONS IN THE UNIT - FAN MOTOR CONNECTIONS	Project title: VentC 6	Printed: 02-06-2005	905306
Designer:		Changed: 02-06-2005	Page: 3 of 34	



EXTRACT FAN
M1

:00: GND
 :01: S+10V
 :02: point input
 :03: GND
 :04: Start/stop



WHITE
 BROWN
 GREEN
 YELLOW
 GREY
 PINK

BROWN
 BLUE
 Y/G

A/S Dantherm

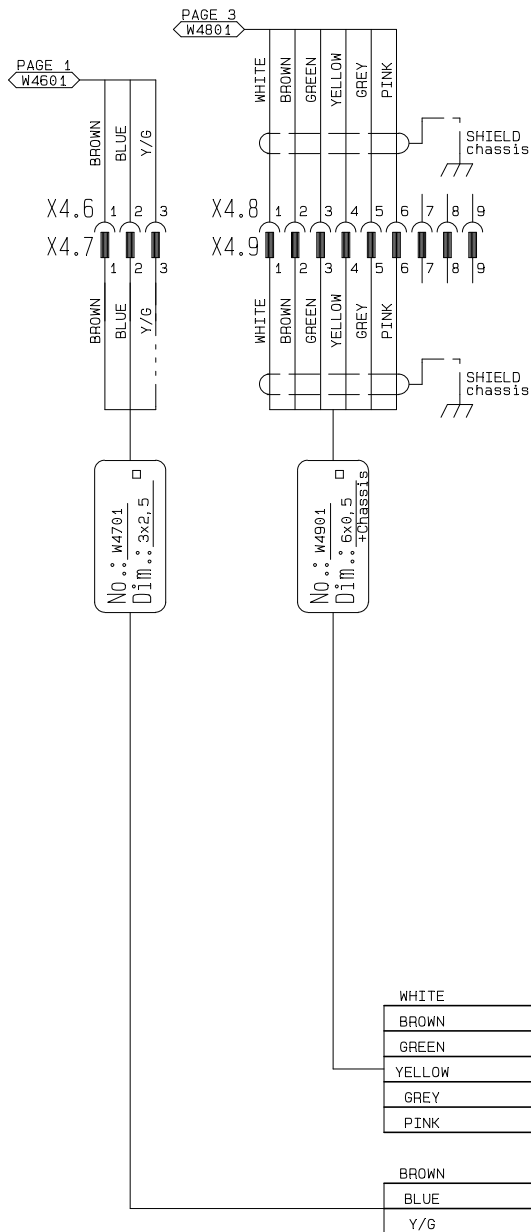
Jagstrupvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: INTERNAL CONNECTIONS IN THE UNIT - PLUGS ON EXTRACT FAN
 Project title: Ventc 6
 Designer:

Customer ref.:

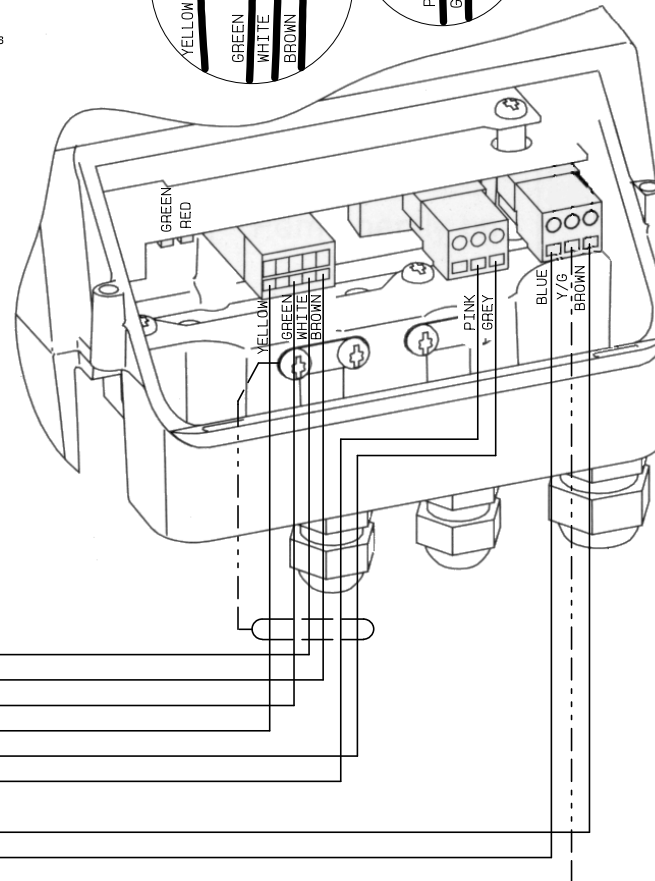
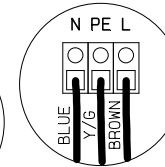
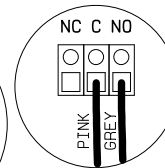
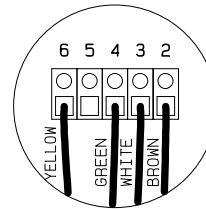
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 Page revision:
 Printed: 02-06-2005
 Changed: 04-02-2004

Dantherm no.:
905306
 Page: 4 of 34

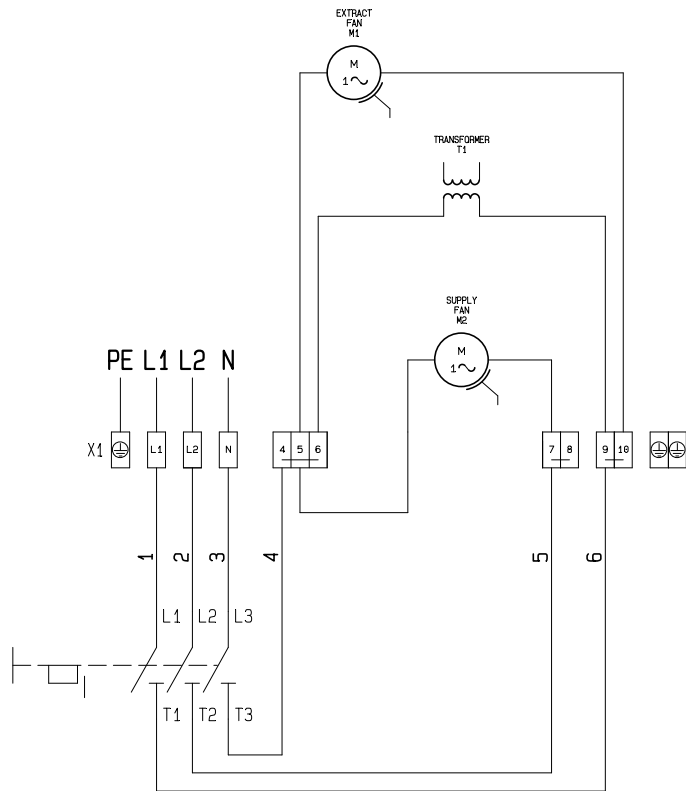


SUPPLY FAN
M2

1: GND
 2: +10V
 3: point input
 4: GND
 5: Start/stop

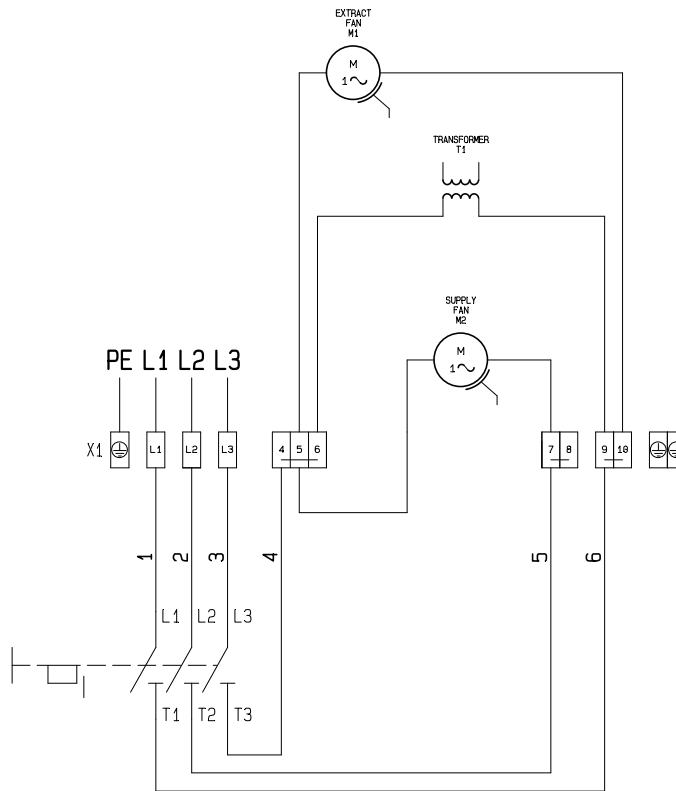


Mains: 2N~ PE 400V

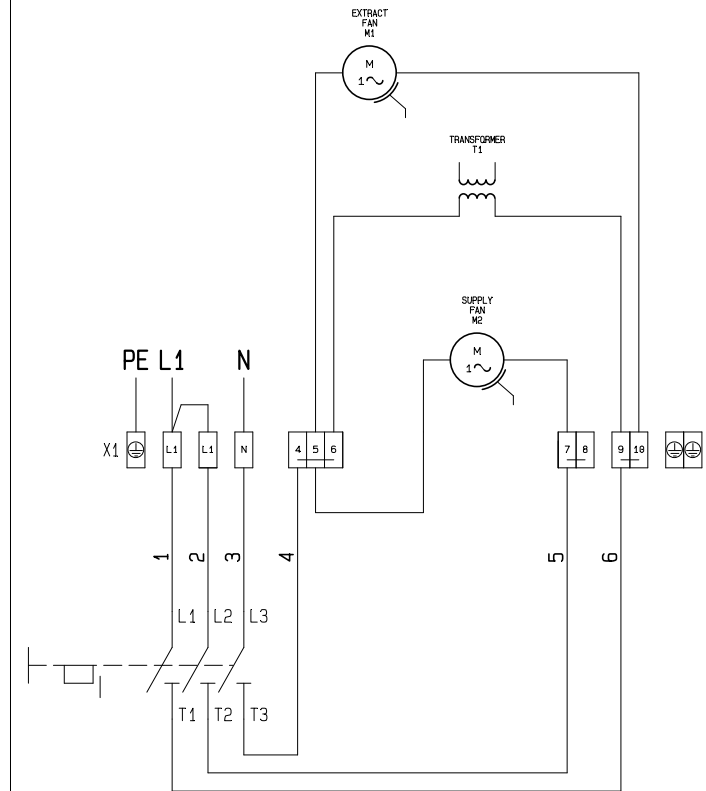


Default mounting:

Mains: 3~ PE 230V



Mains: 1N~ PE 230V



A/S Dantherm

Jegstrupvej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: MAINS - 2N~ PE 400V, 3~ PE 230V & 1N~ PE 230V

Project title: VentC 6

Designer:

Customer ref.:

Revision:

Page revision:

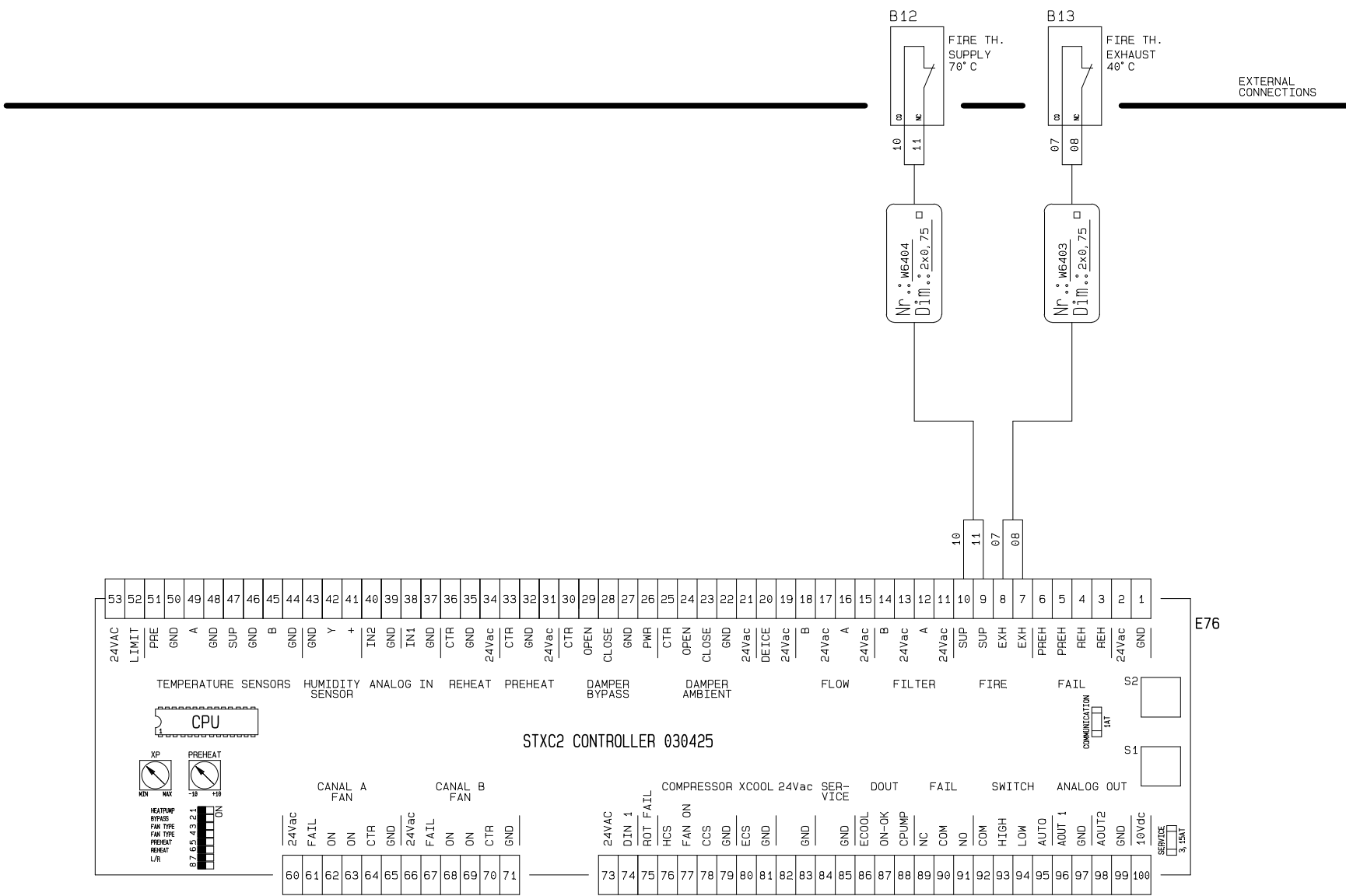
Printed: 02-06-2005

Changed: 04-02-2004

Dantherm no.:

905306

Page: 6 of 34



STXC2 CONTROLLER 030425

A/S Dantherm

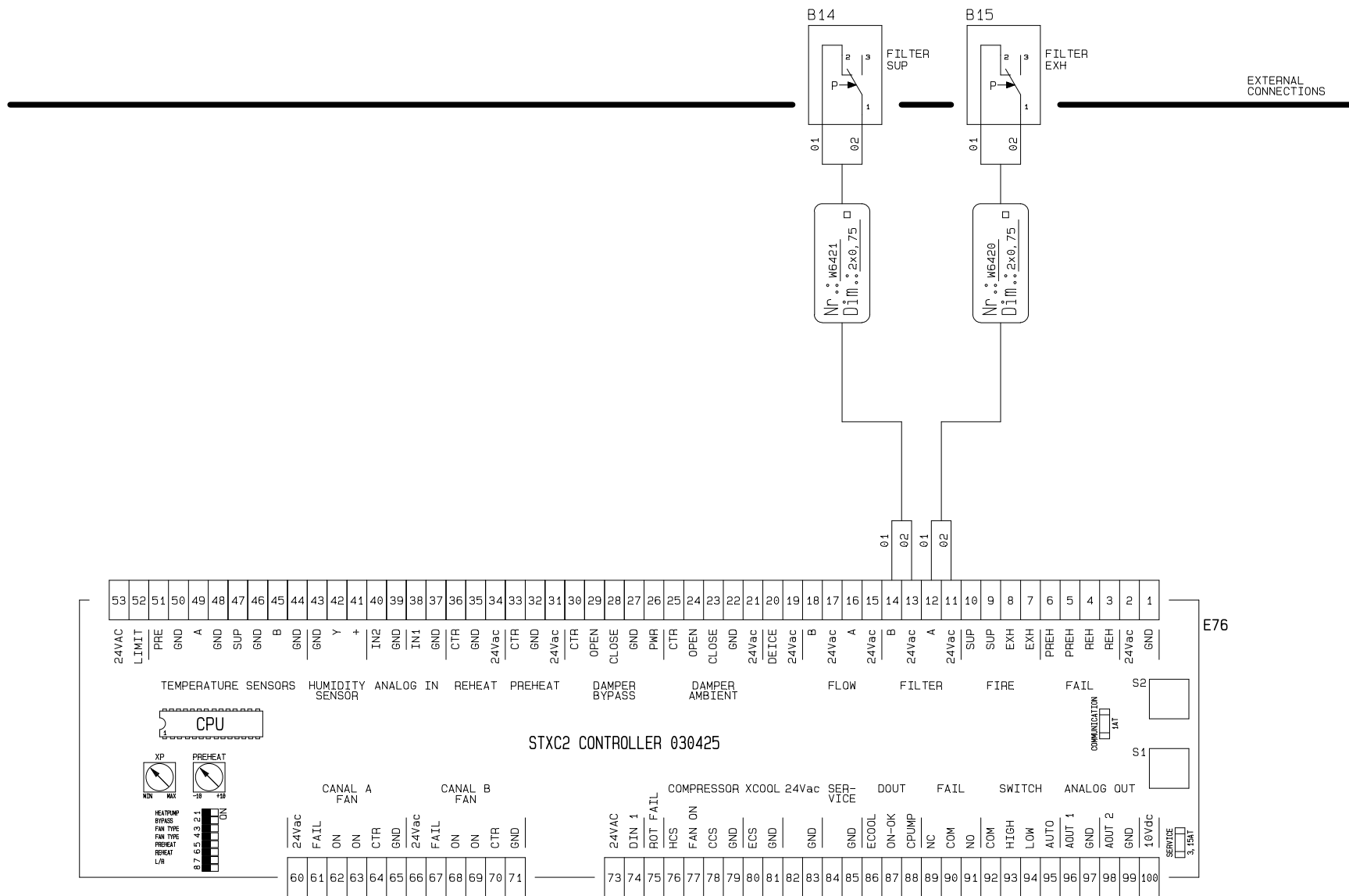
Jagstrupevej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION - FIRE THERMOSTATS
 Project title: VentC 6
 Designer:

Customer ref.:

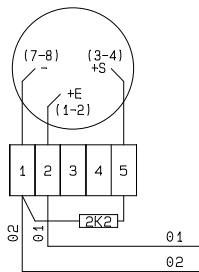
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 Changed: 02-06-2005

Dantherm no.:
905306
 Page: 7 of 34



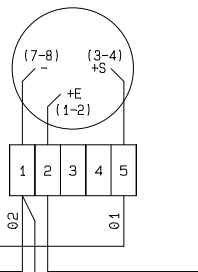
SUPPLY AIR DUCT

(VS-1130 / VS-1150)

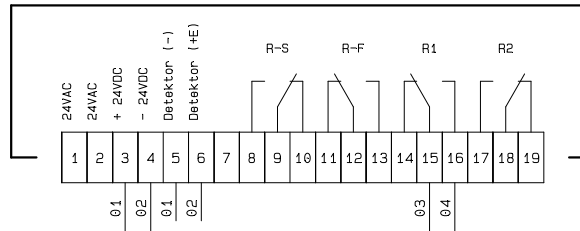


EXTRACT AIR DUCT

(VS-1130 / VS-1150)



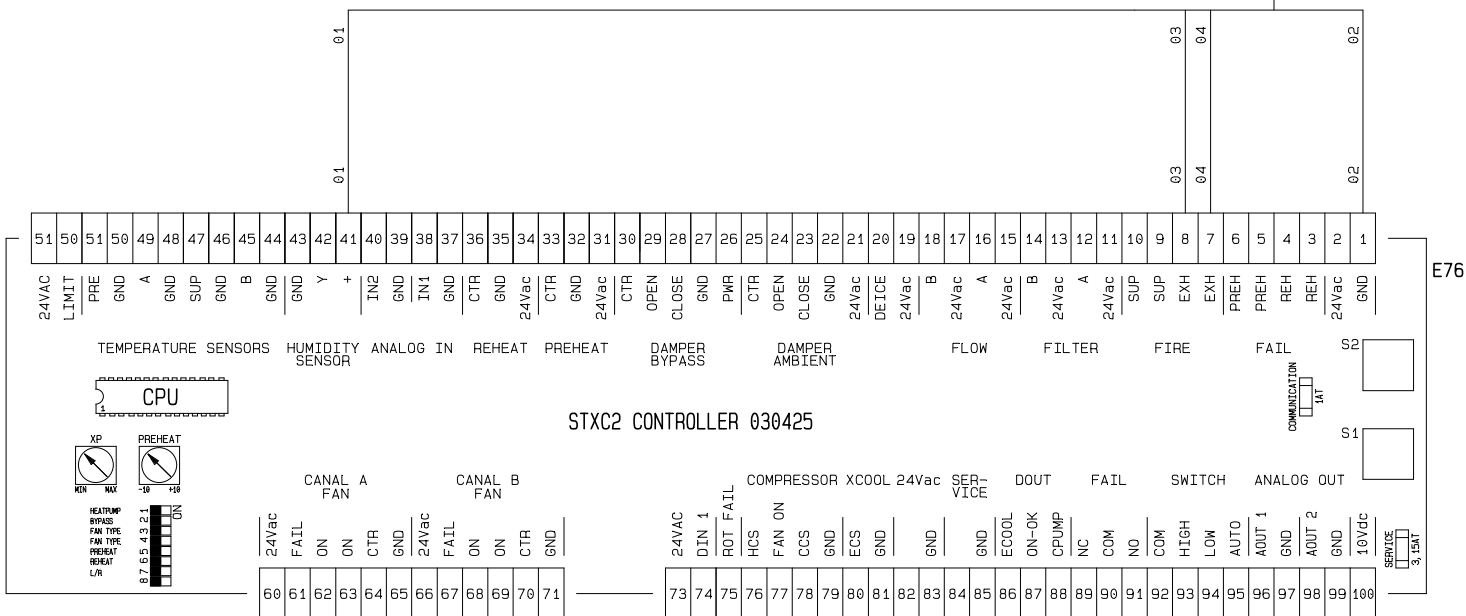
Smoke detector
(REGIN ABV-S-100)



Nr.: W6427
Dim.: 2x0,75

Nr.: W6426
Dim.: 2x0,75

Nr.: W6425
Dim.: 2x0,75



A/S Dantherm

Jagstrupevej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: OPTION - SMOKE DETECTOR

Project title: VentC 6

Designer:

Customer ref.:

Revision:

Page revision:

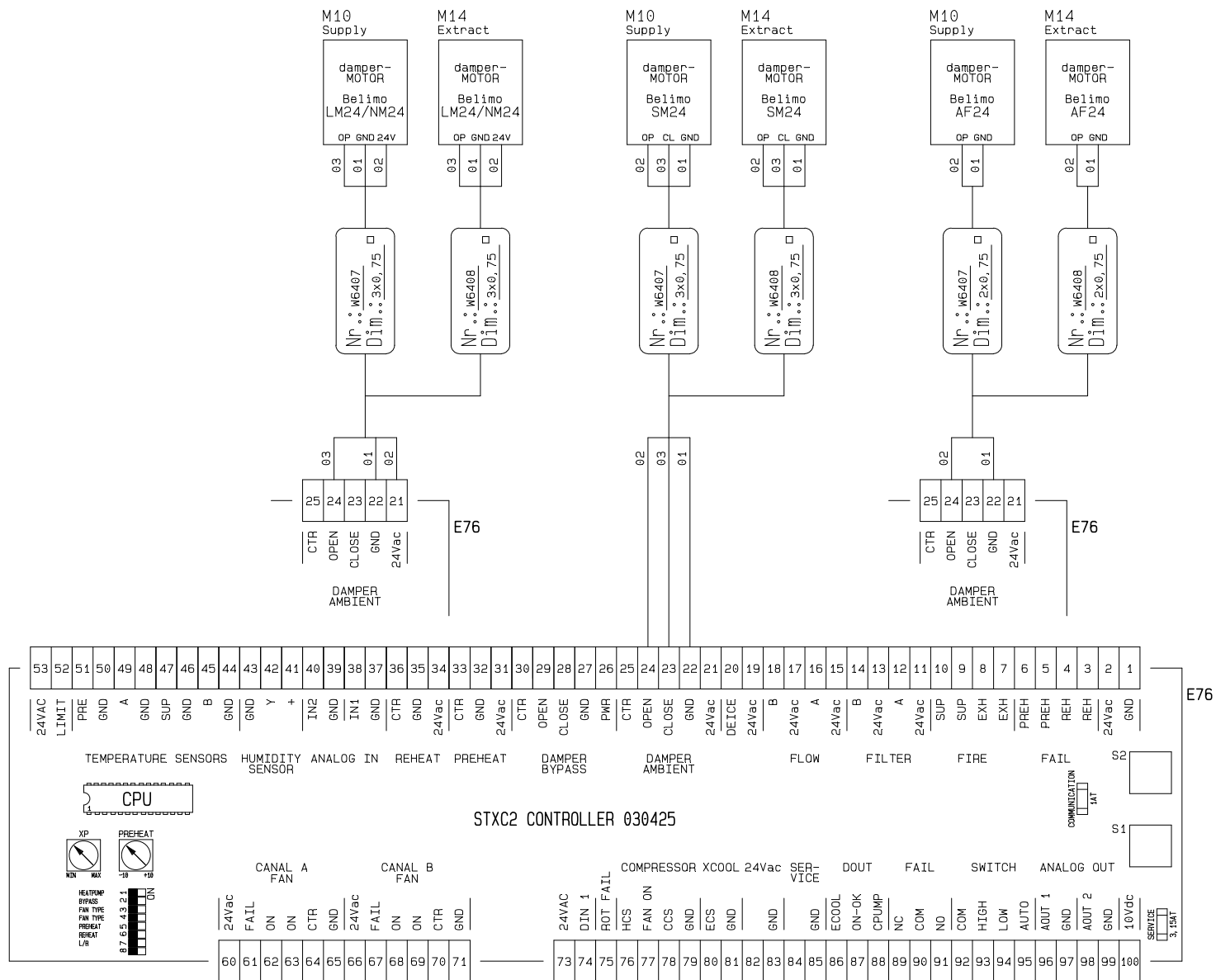
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Changed: 02-06-2005

Dantherm no.:

905306

Page: 9 of 34



A/S Dantherm

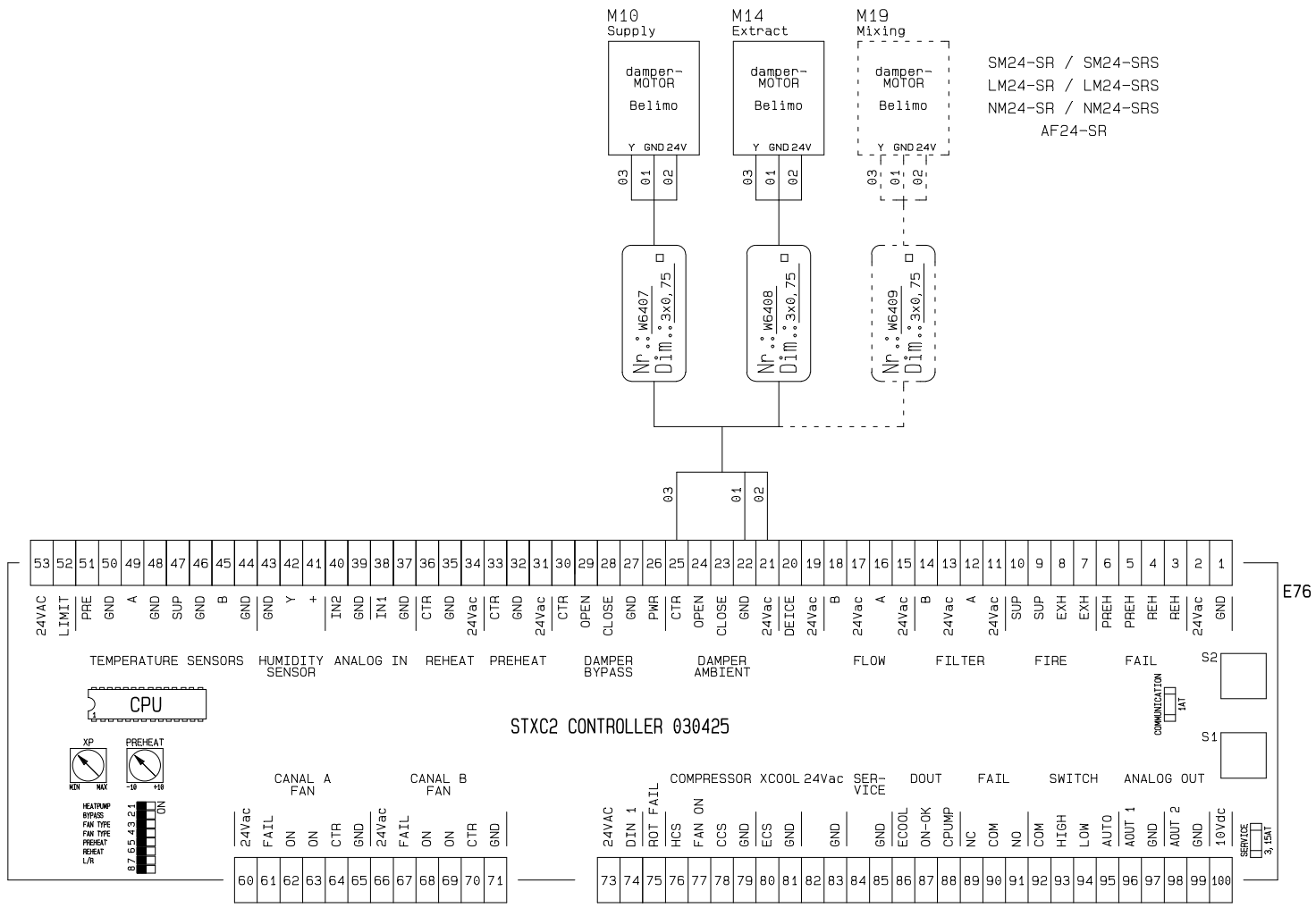
Jægstрупvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION - DAMPER CONNECTIONS (ON/OFF)
 Project title: VentC 6
 Designer:

Customer ref.:

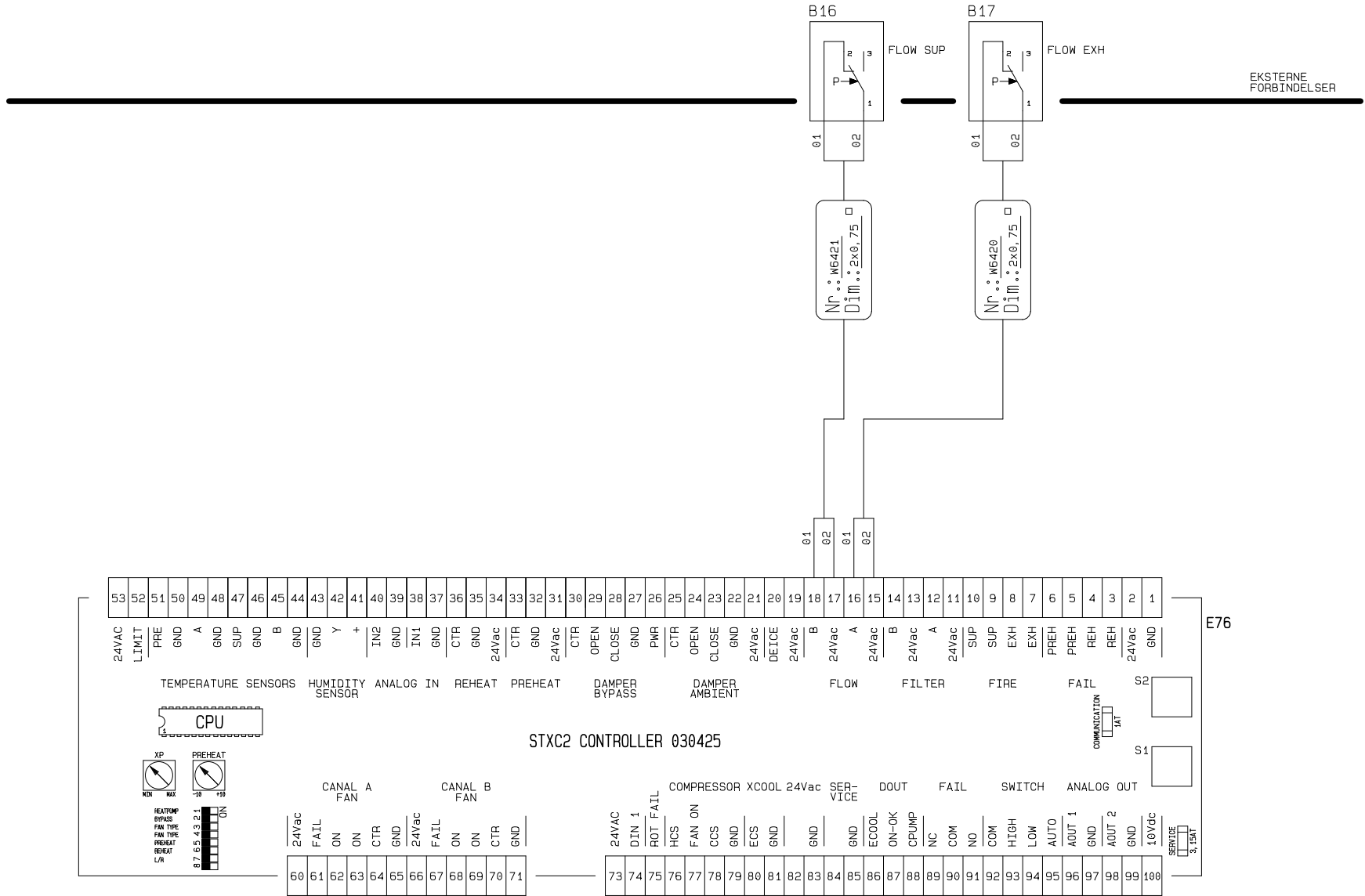
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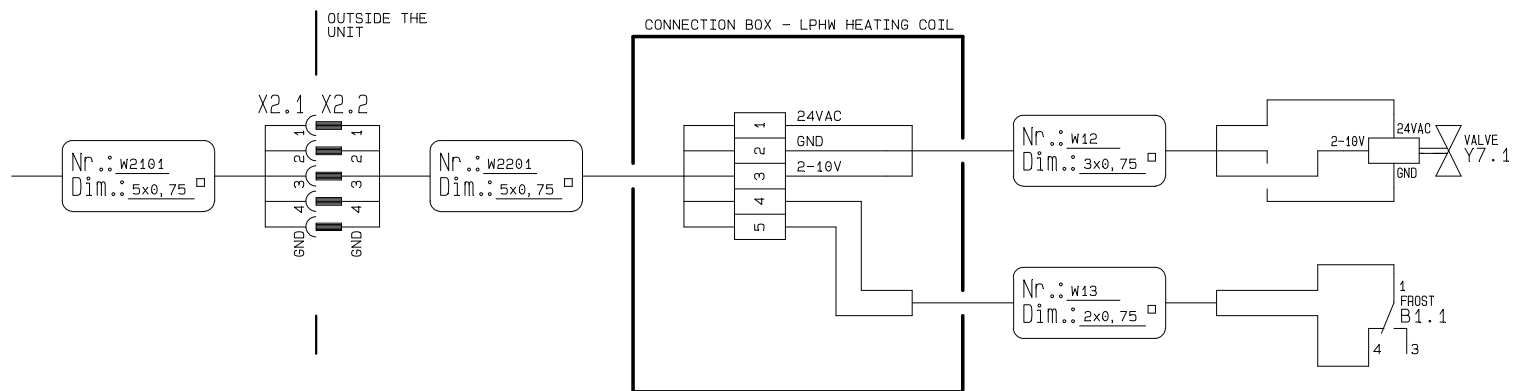
Dantherm no.:
905306
 Page: 10 of 34



SM24-SR / SM24-SRS
LM24-SR / LM24-SRS
NM24-SR / NM24-SRS
AF24-SR

A/S Dantherm Jagstrupvej 4, DK - 7800 Skive Tel. +45 97 52 41 44 Fax. +45 97 52 61 34	Customer: A/S DANTHERM	Customer ref.:	Revision:	Dantherm no.:
	Item: OPTION - DAMPER CONNECTIONS (MODULATED)		Page revision:	905306
	Project title: VentC 6		Printed: 02-06-2005	
	Designer:		Changed: 02-06-2005	Page: 11 of 34





A/S Dantherm

Jægstрупvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: OPTION - REHEAT (LPHW)

Project title: VENT C 6

Designer:

Customer ref.:

Revision:

Page revision:

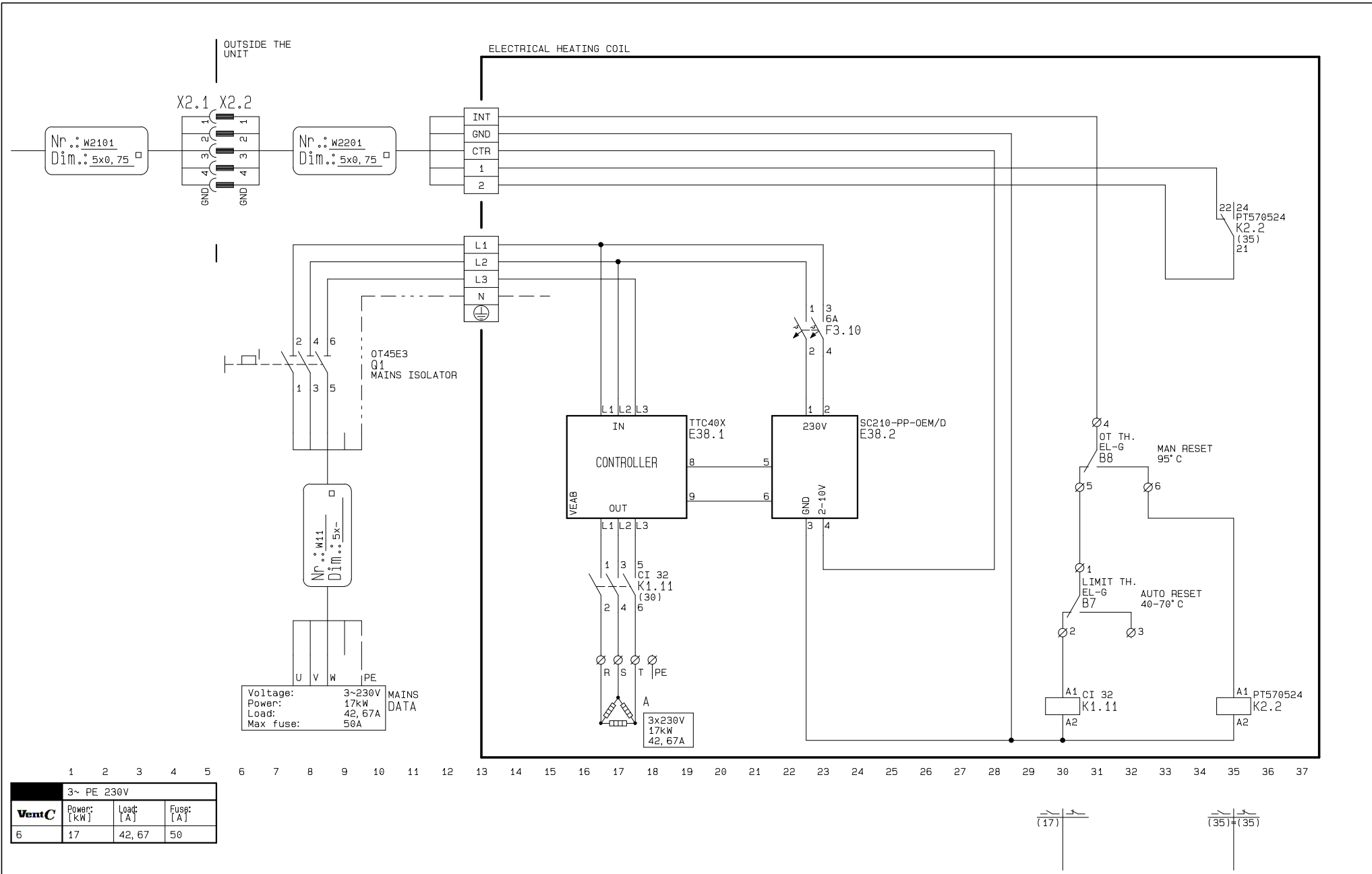
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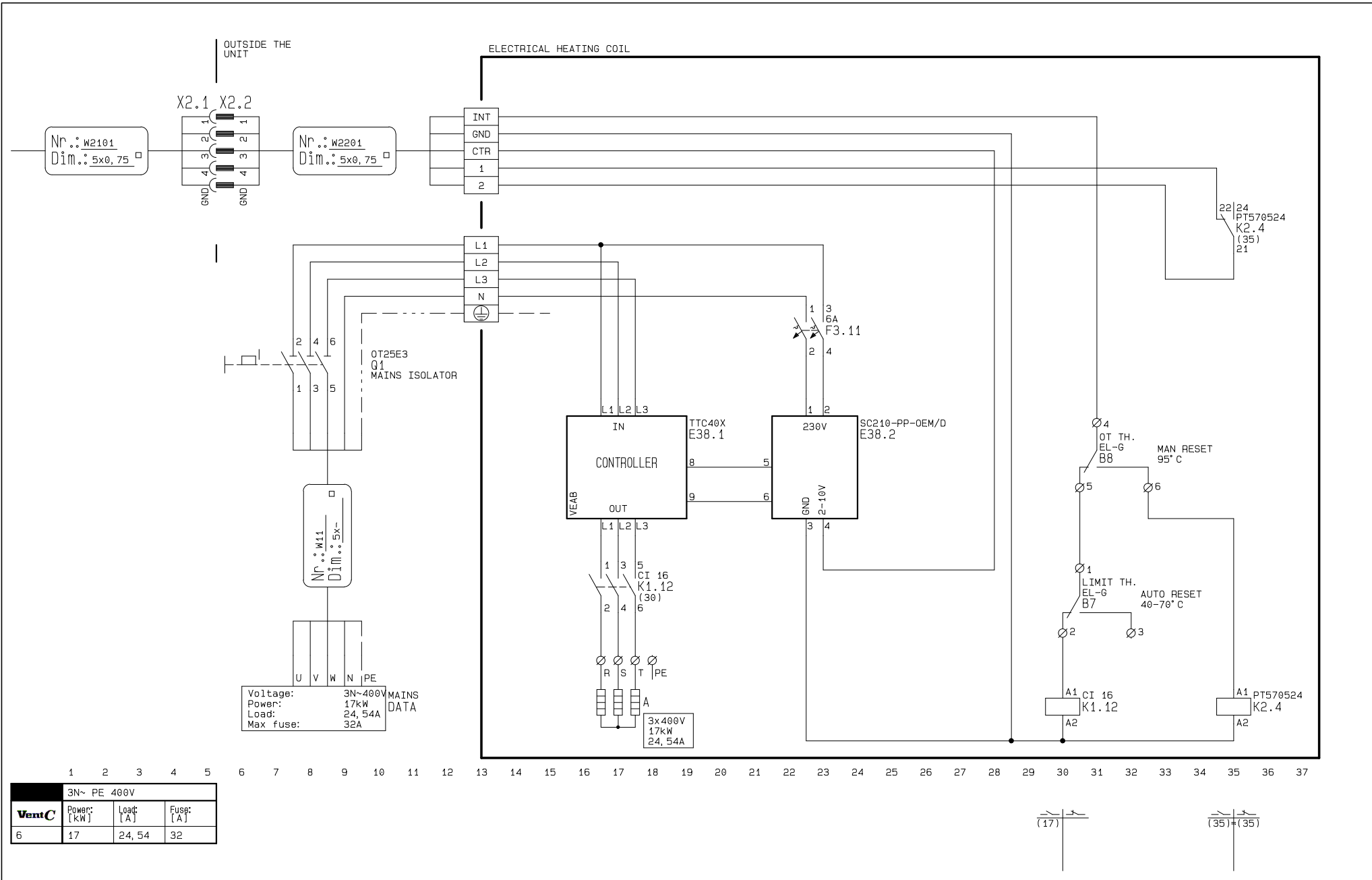
Dantherm no.:

905306

Page: 13 of 34



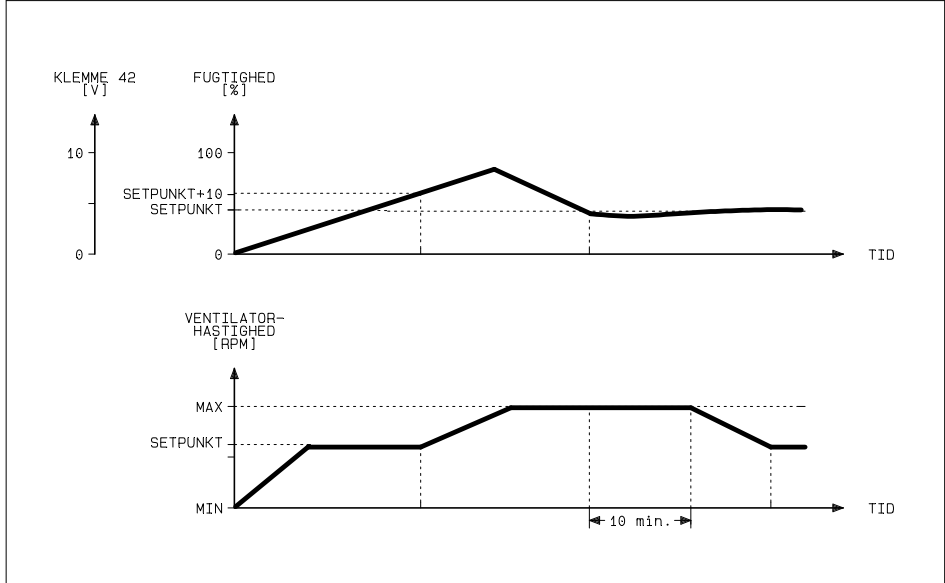
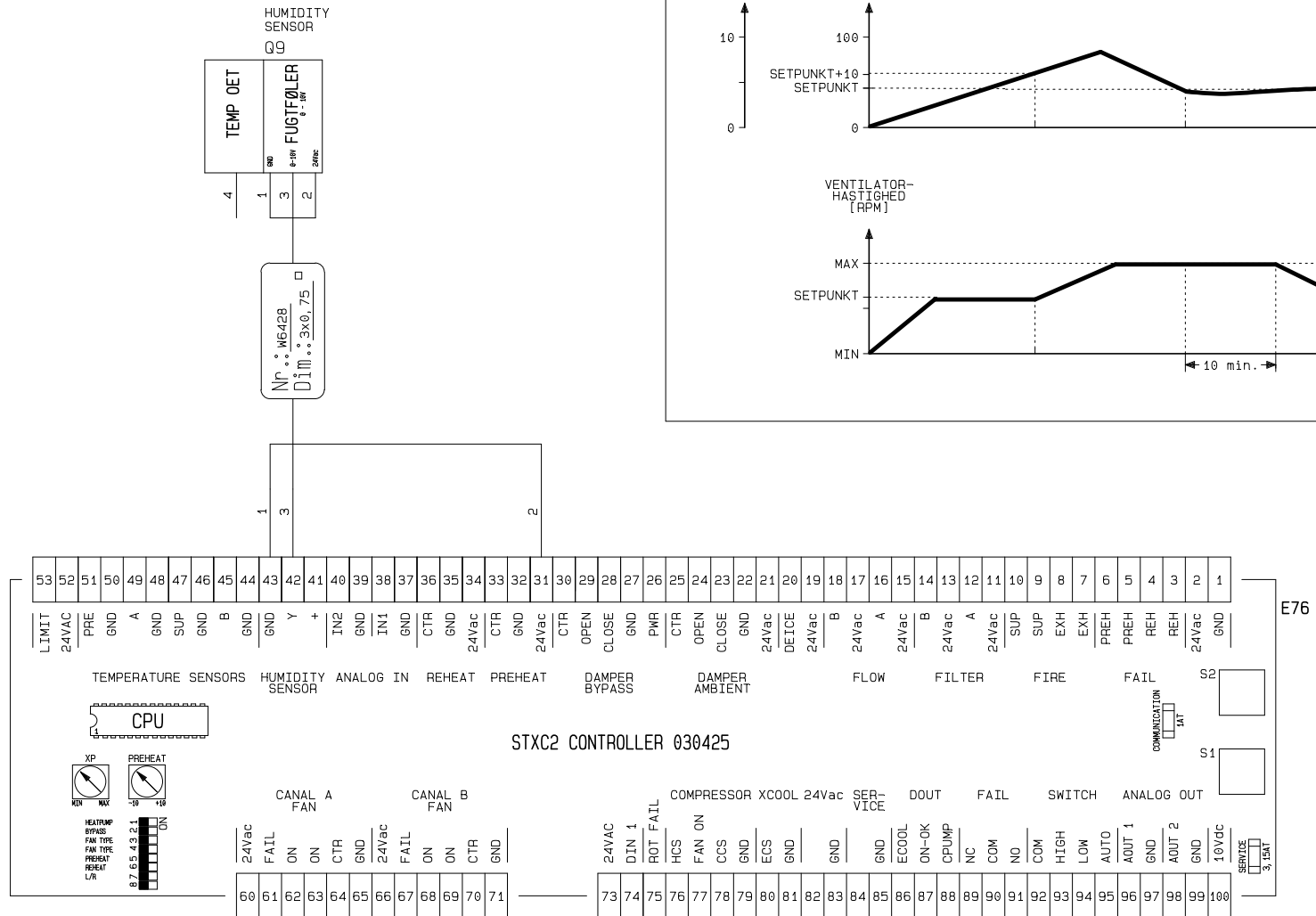
A/S Dantherm Jagstrupvej 4, DK - 7800 Skive Tel. +45 97 52 41 44 Fax. +45 97 52 61 34	Customer:	A/S DANTHERM	Customer ref.:	Revision:	Dantherm no.:
	Item:	OPTION - REHEAT (ELECTRICAL) 3~ PE 230V	Printed:	02-06-2005	905306
	Project title:	VentC 6	Changed:	02-06-2005	Page: 14 of 34
	Designer:				

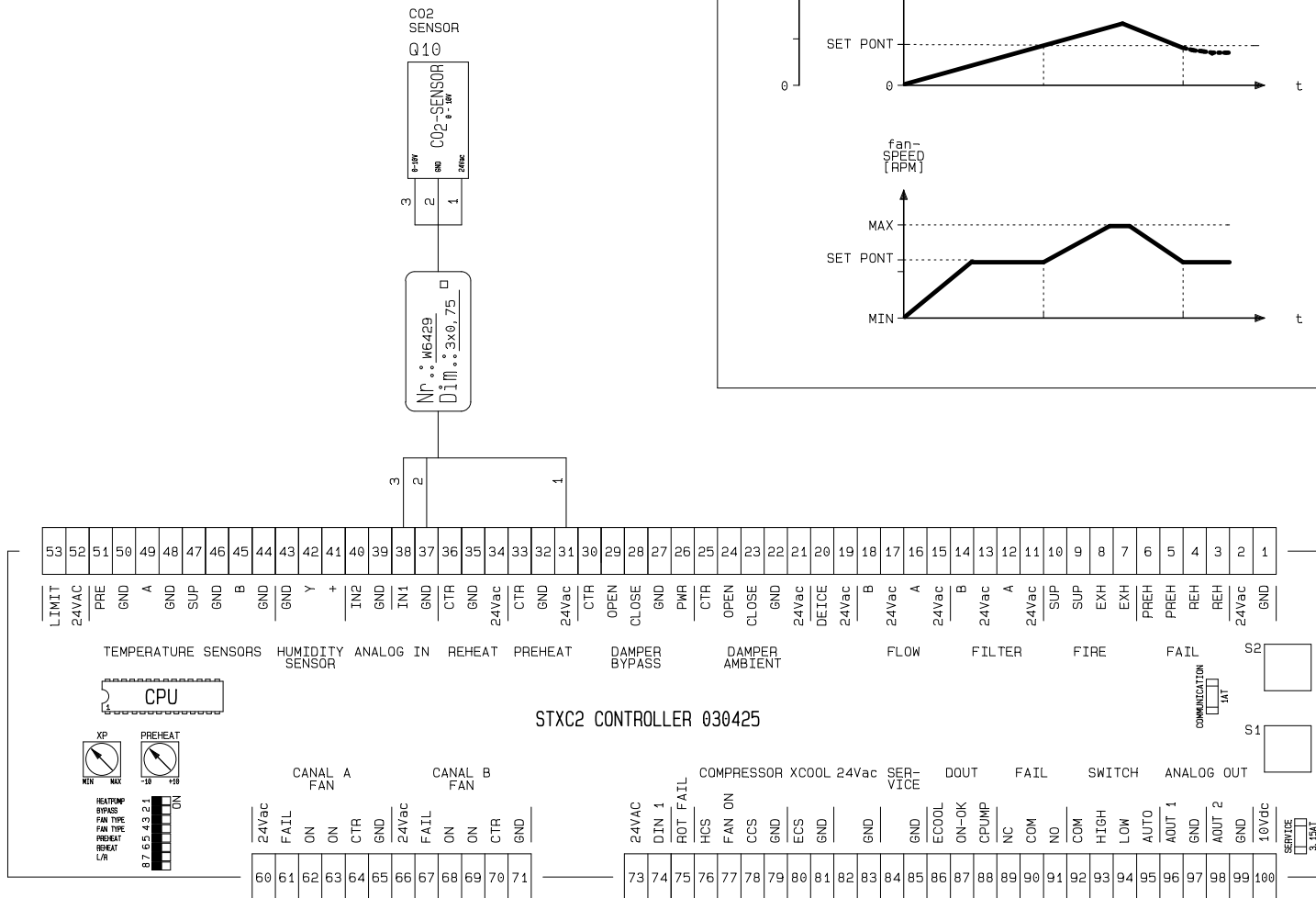


Voltage: 3N~400V
 Power: 17kW
 Load: 24, 54A
 Max fuse: 32A

	3N~ PE 400V		
VentC	Power: [kW]	Load: [A]	Fuse: [A]
6	17	24, 54	32

A/S Dantherm Jagstrupvej 4, DK - 7800 Skive Tel. +45 97 52 41 44 Fax. +45 97 52 61 34	Customer: A/S DANTHERM	Customer ref.:	Revision:	Dantherm no.:
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	Project title: VentC 6		Printed: 02-06-2005	
	Designer:		Changed: 02-06-2005	Page: 15 of 34





A/S Dantherm
 Jagstrupvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION - CO2 SENSOR
 Project title: VentC 6
 Designer:

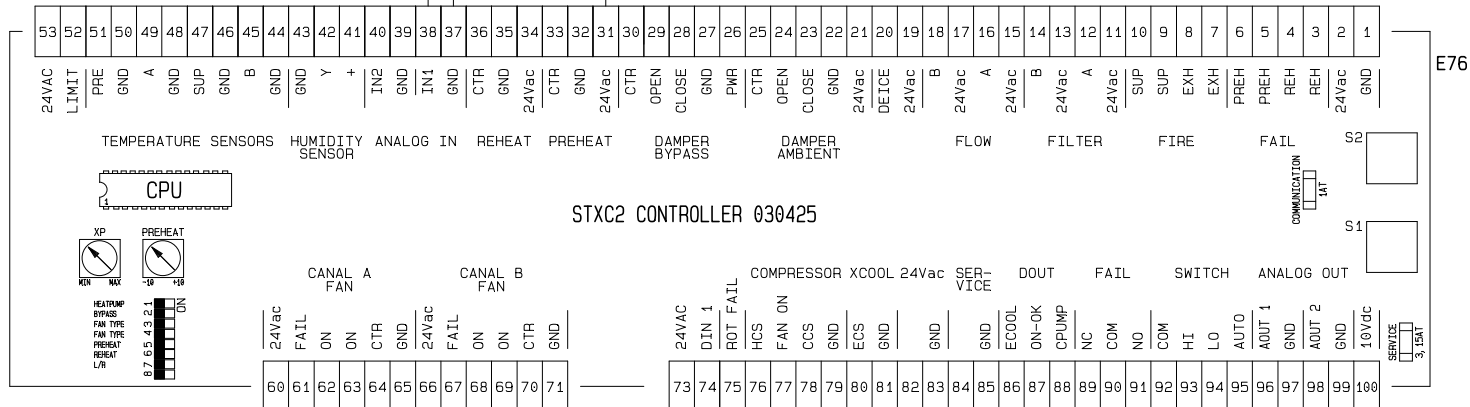
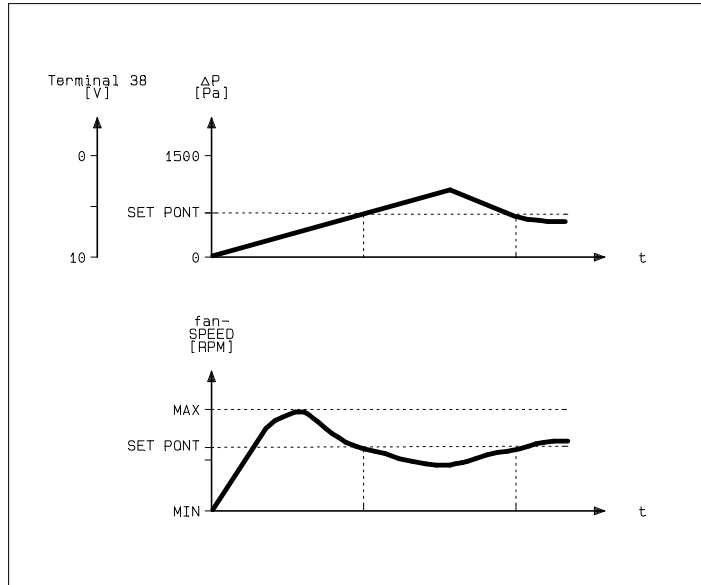
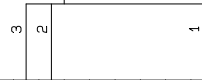
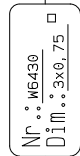
Customer ref.:

Revision:
 Page revision:
 Printed: 02-06-2005
 Changed: 02-06-2005

Dantherm no.:
905306
 Page: 17 of 34

PRESSURE SENSOR
PLACED IN THE
SUPPLY AIR DUCT
(CONSTANT PRESSURE)

PRESSURE
SENSOR
Q11



A/S Dantherm

Jagstrupevej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: OPTION - CONSTANT PRESSURE IN THE SUPPLY AIR DUCT (VAV)

Project title: VentC 6

Designer:

Customer ref.:

Revision:

Page revision:

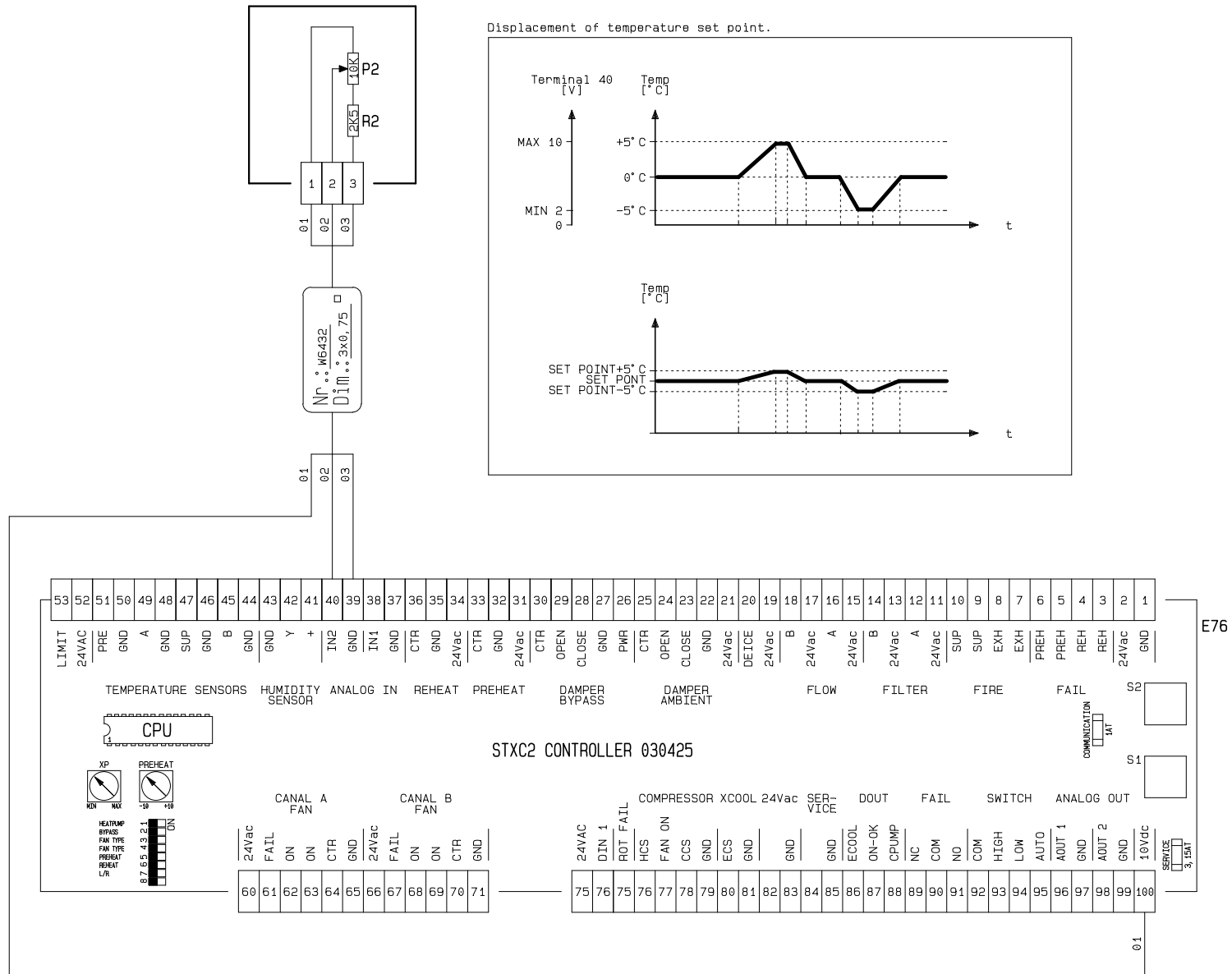
Printed: 02-06-2005

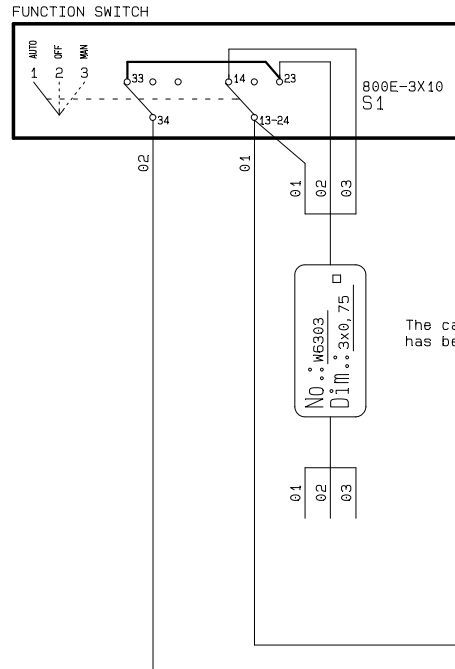
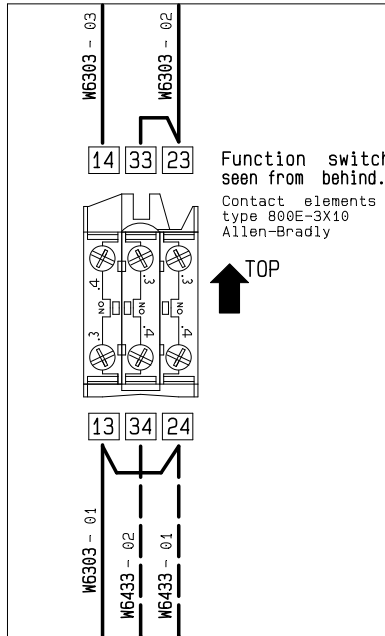
Changed: 02-06-2005

Dantherm no.:

905306

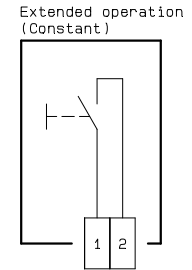
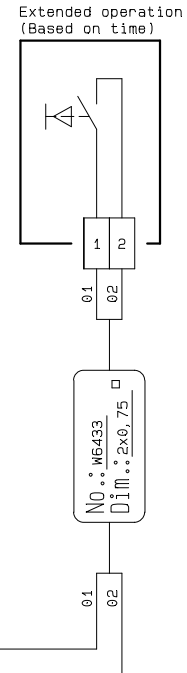
Page: 18 of 34





Extended operation:
The function is only
activated by the
function switch S1
in position AUTO.

Parameters
in manual mode.



A/S Dantherm

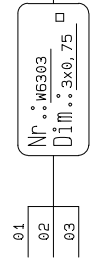
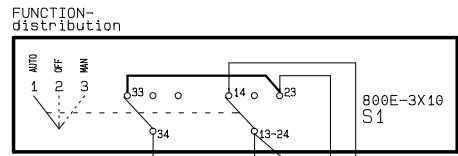
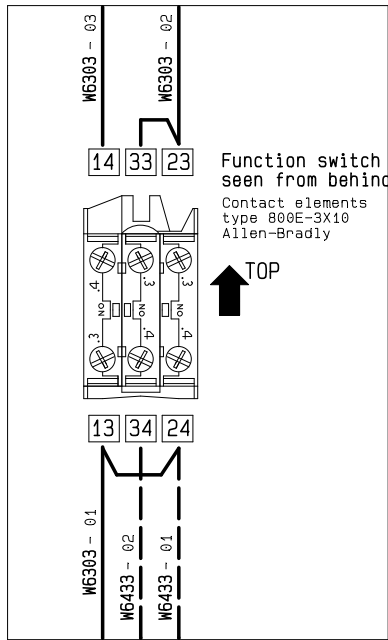
Jagstrupvej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTERM
Item: OPTION - EXTENDED OPERATION
Project title: VENT C 6
Designer:

Customer ref.:

Revision:
Page revision:
Printed: 02-06-2005
Changed: 09-11-2001

Dantherm no.:
905306
Page: 20 of 34

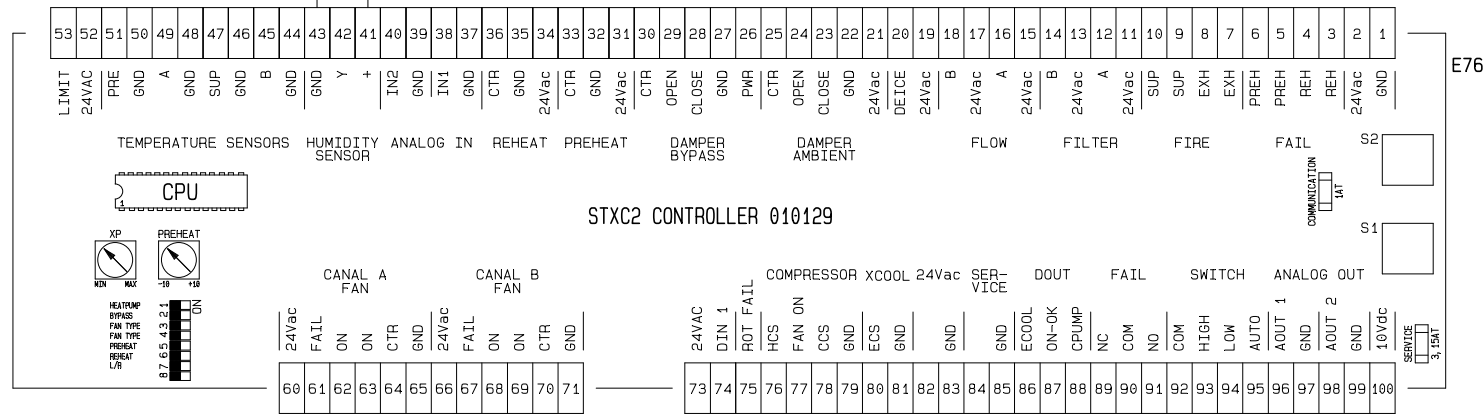
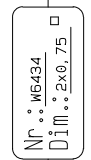
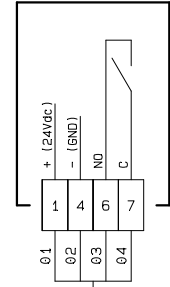


the cable6303 has been connected.

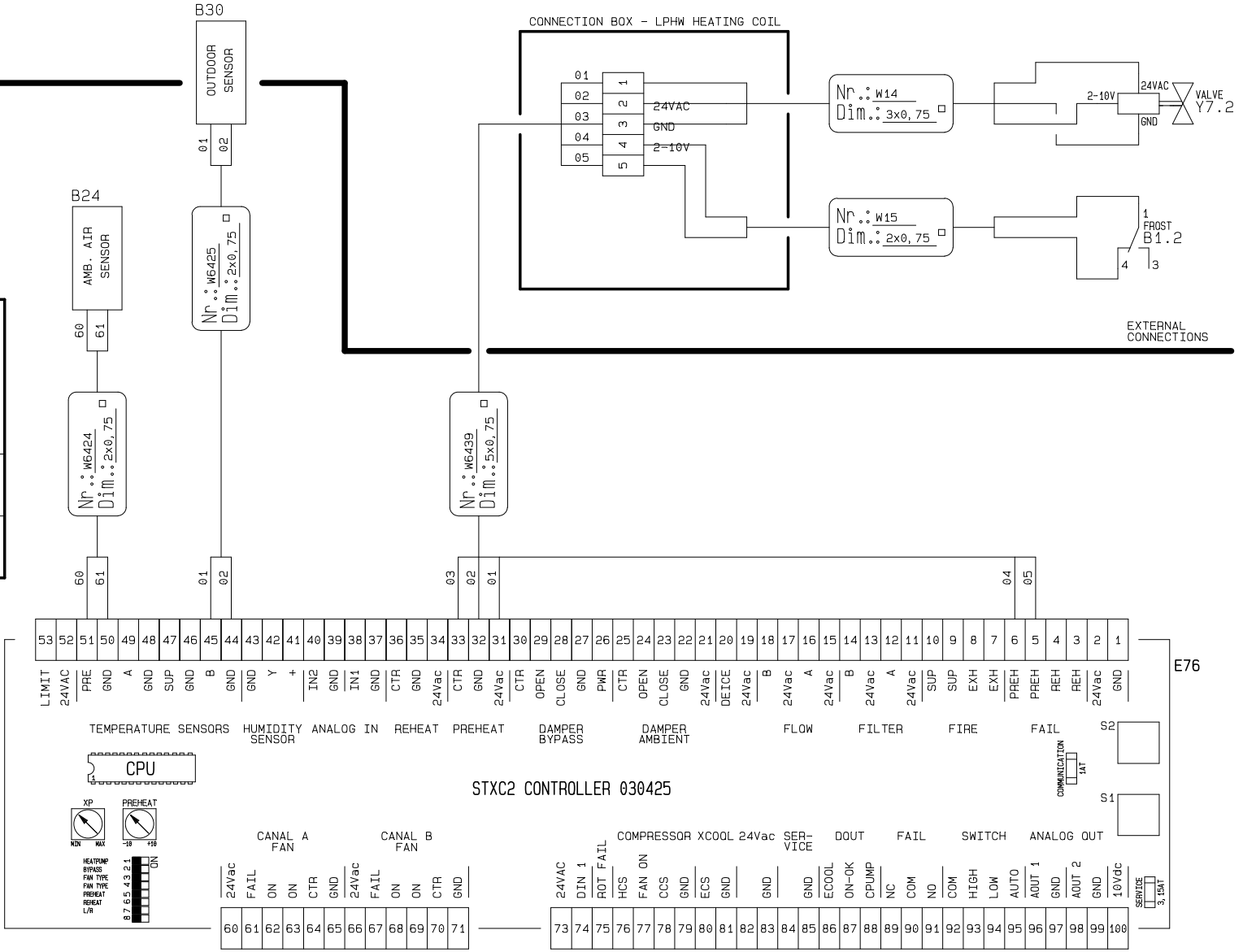
Motion observer (PIR: the function is only activated by the function switch S1 in position AUTO.

parameters in manual mode on.

Motion observer (PIR: (SERVODAN)



- 1 The resistor R1 is removed from terminals 50-51.
- 2 The ambient air sensor B24 is moved from terminals 44-45 to terminals 50-51.
- 3 Ude-føleren B30 to the terminals 44-45.



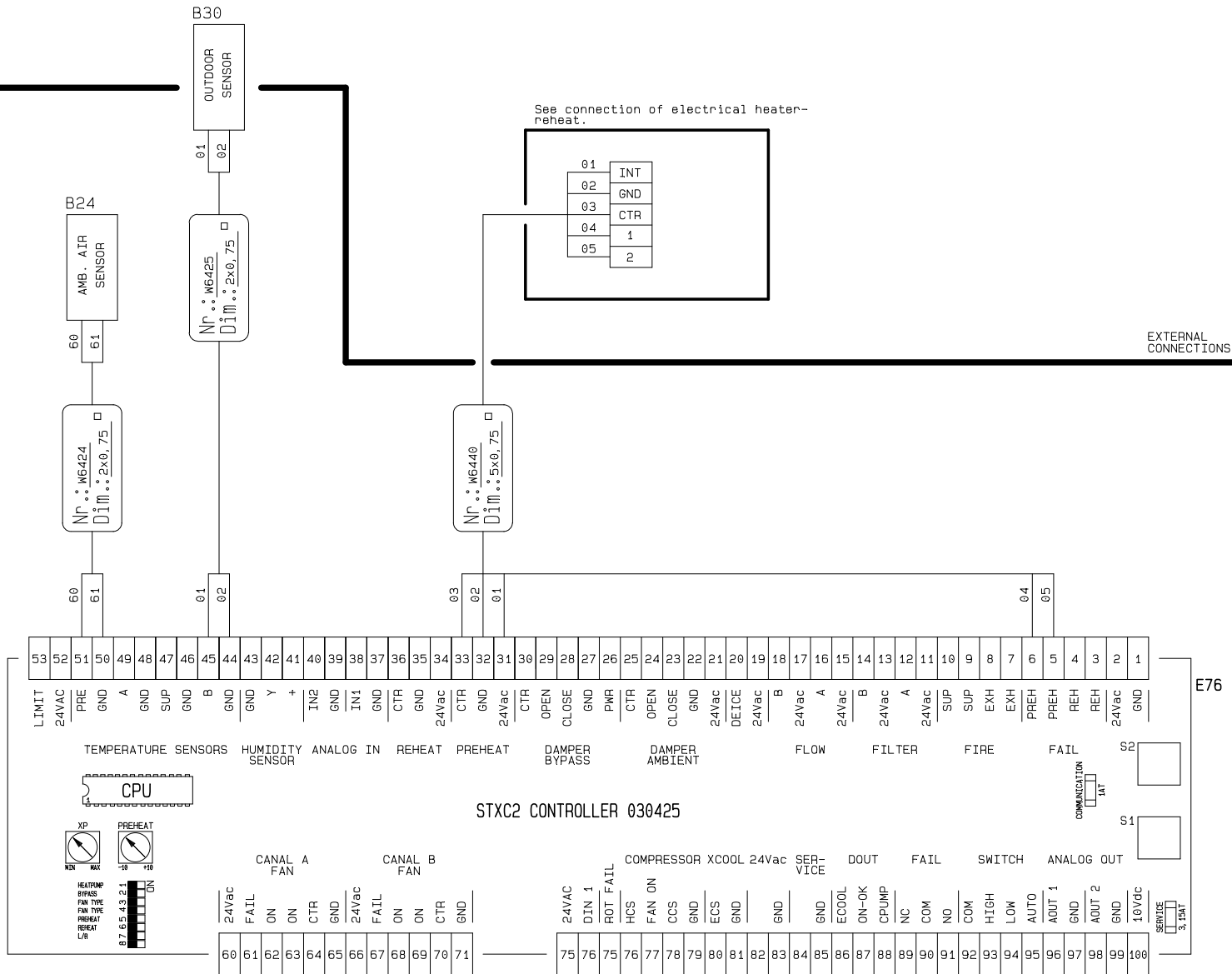
A/S Dantherm
 Jagstrupvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION - PREHEAT (LPHW)
 Project title: VentC 6
 Designer:

Customer ref.:
 Revision:
 Page revision:
 Printed: 02-06-2005
 Changed: 02-06-2005

Dantherm no.:
905306
 Page: 22 of 34

- 1 The resistor R1 is removed from terminals 50-51.
- 2 The ambient air sensor B24 is moved from terminals 44-45 to terminals 50-51.
- 3 Outside sensor B30 to the terminals 44-45.



A/S Dantherm

Jægstрупvej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

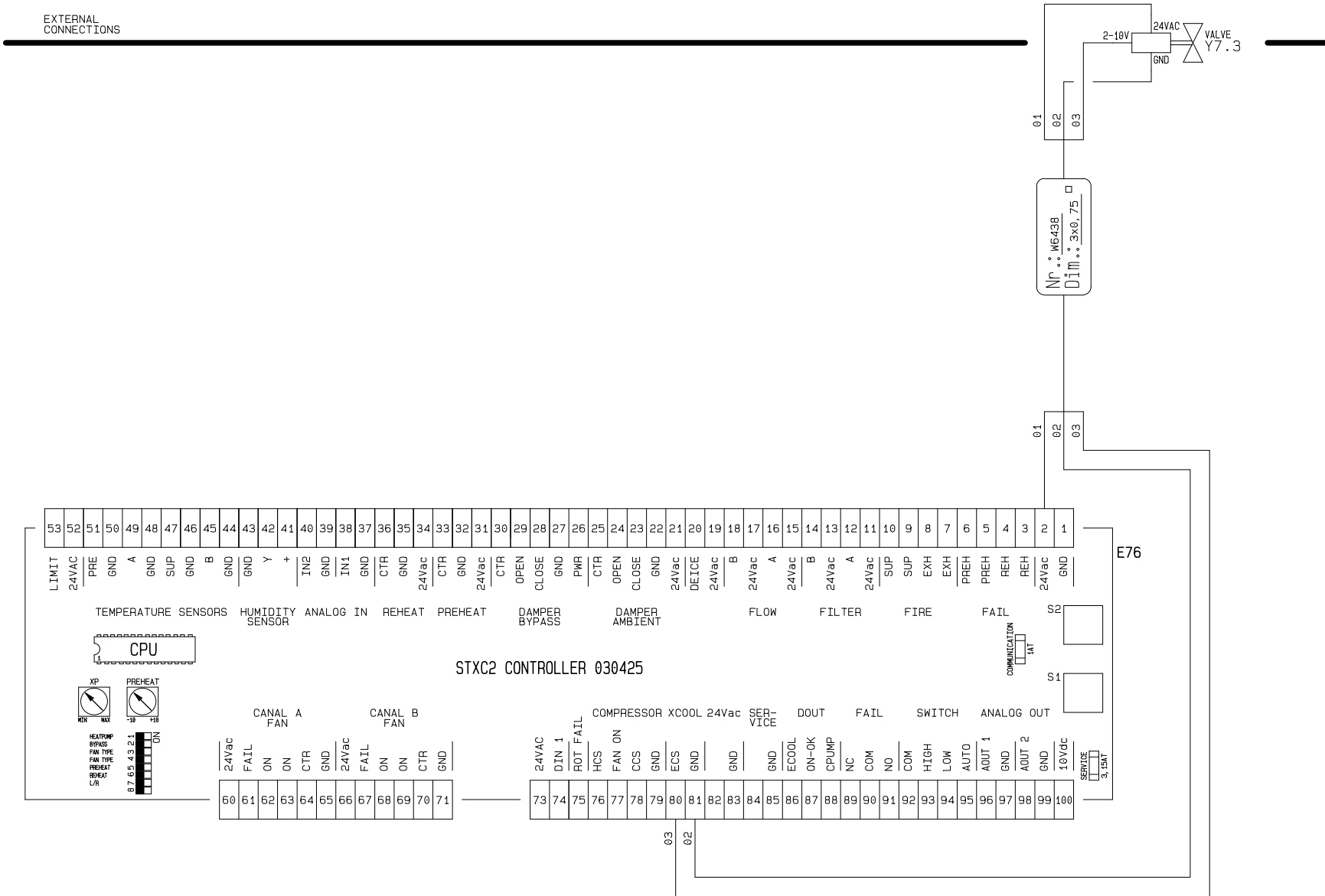
Customer: A/S DANTHERM
Item: OPTION - PREHEAT (ELECTRICAL)
Project title: VentC 6
Designer:

Customer ref.:

Revision:
Page revision:
Printed: 02-06-2005
Changed: 02-06-2005

Dantherm no.:
905306
Page: 23 of 34

EXTERNAL CONNECTIONS



A/S Dantherm
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 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION - DX COIL (BASED ON WATER)
 Project title: VentC 6
 Designer:

Customer ref.:

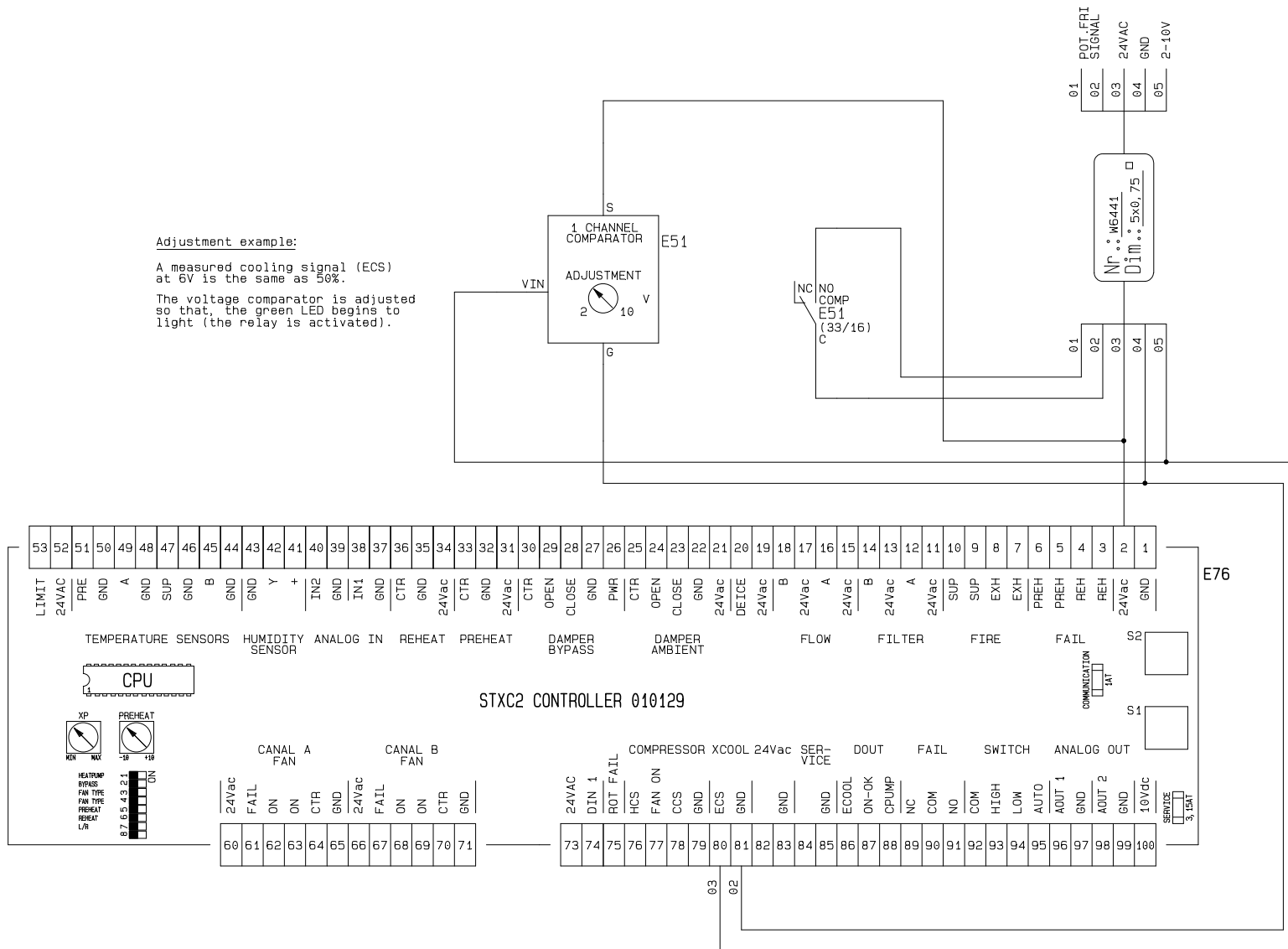
Revision:
 Page revision:
 Printed: 02-06-2005
 Changed: 02-06-2005

Dantherm no.:
905306
 Page: 24 of 34

Adjustment example:

A measured cooling signal (ECS) at 6V is the same as 50%.

The voltage comparator is adjusted so that, the green LED begins to light (the relay is activated).



A/S Dantherm

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Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: OPTION - DX COIL (CAPACITY CONTROL) COMPRESSOR

Project title: VentC 6

Designer:

Customer ref.:

Revision:

Page revision:

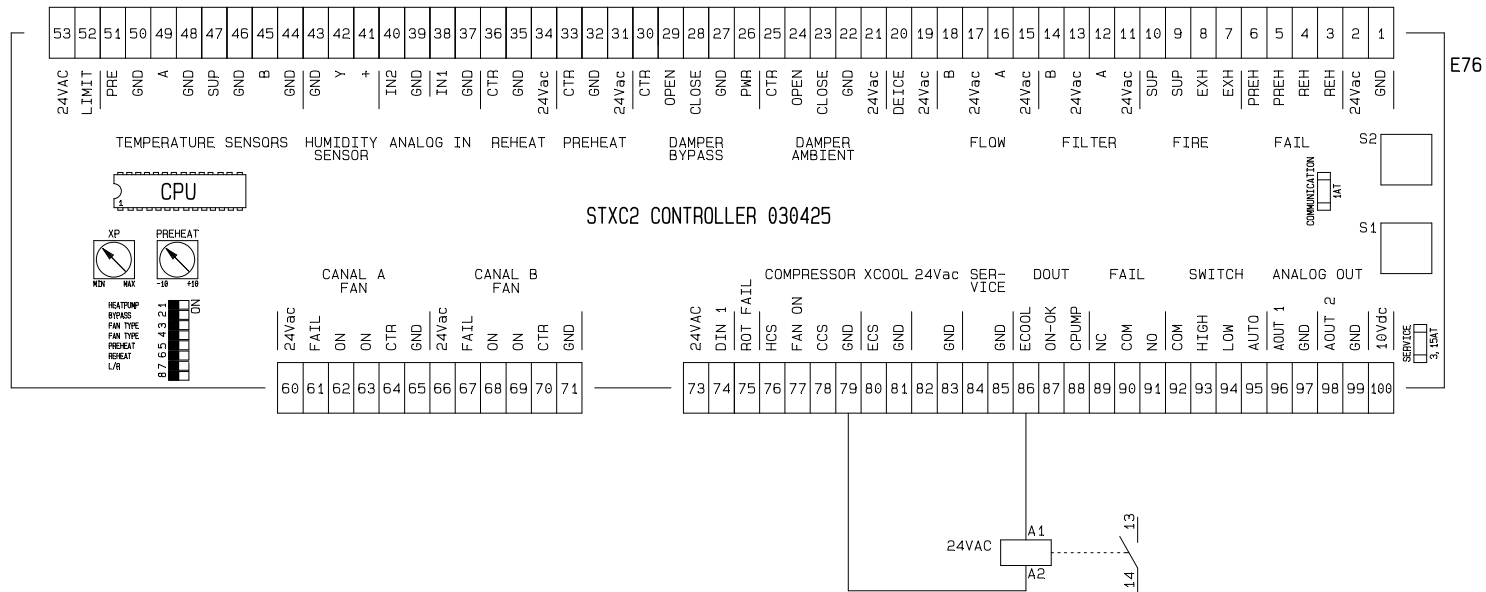
Printed: 02-06-2005

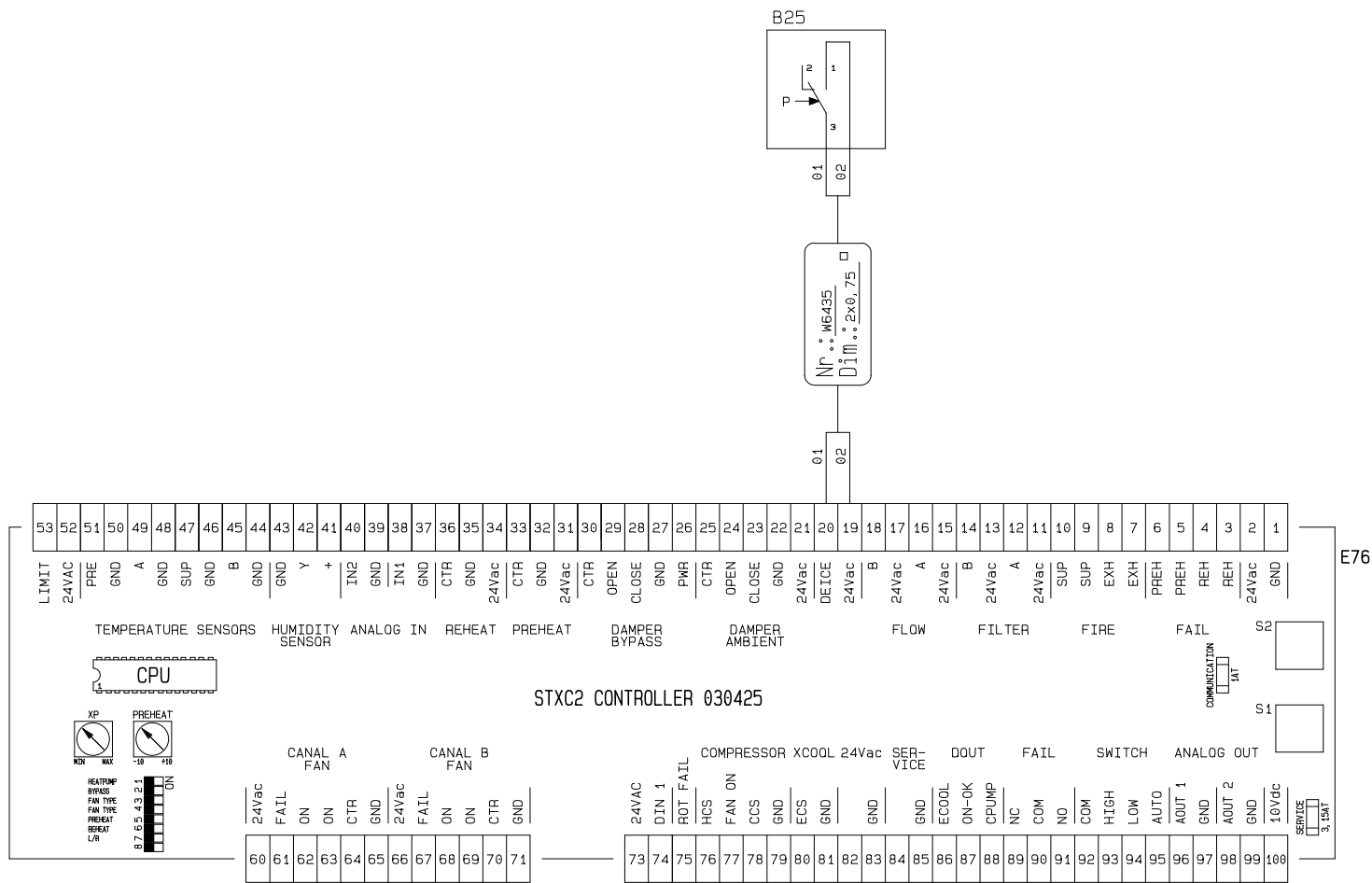
Changed: 02-06-2005

Dantherm no.:

905306

Page: 25 of 34





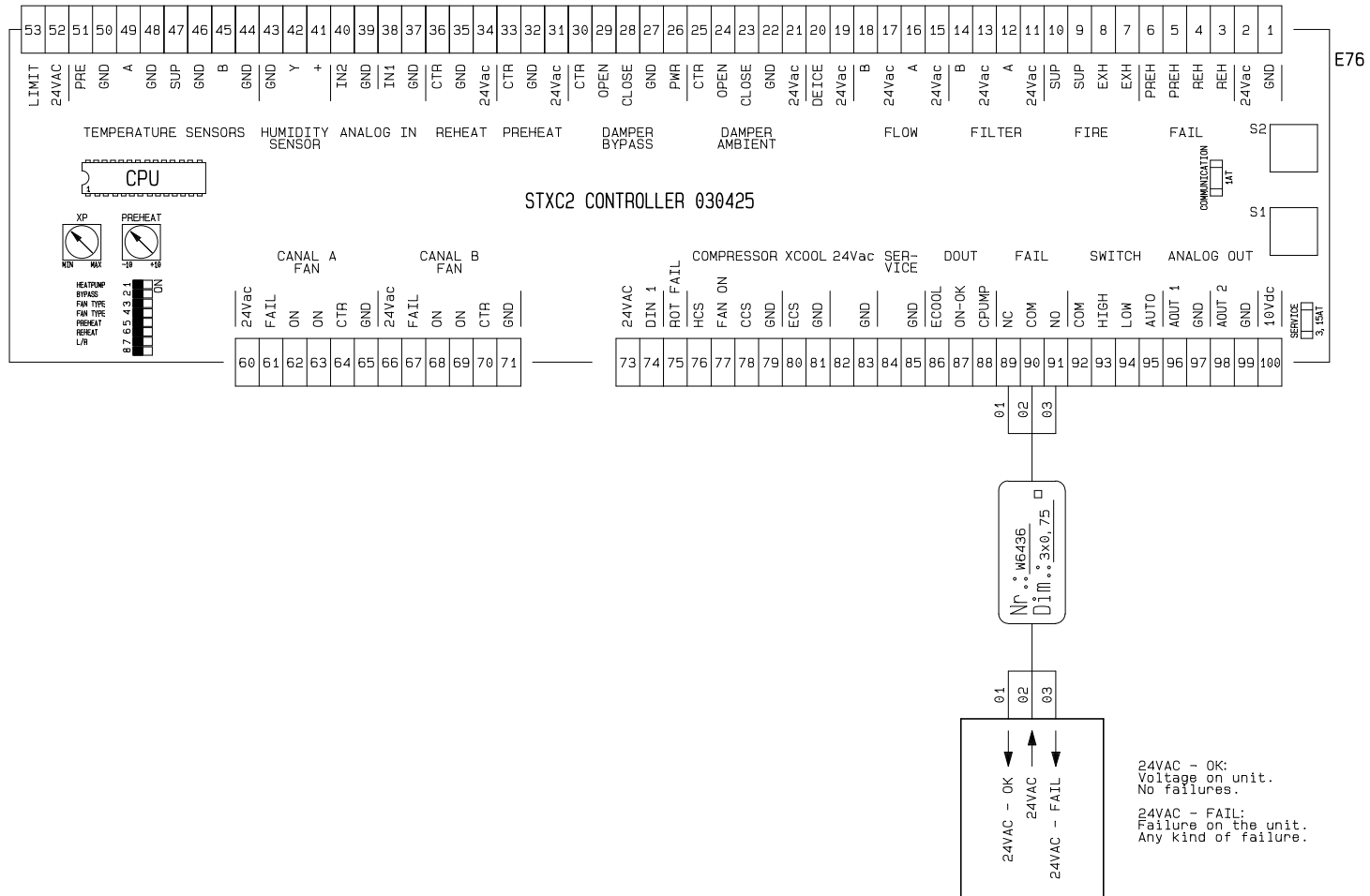
A/S Dantherm
 Jagstrupvej 4, DK - 7800 Skive
 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

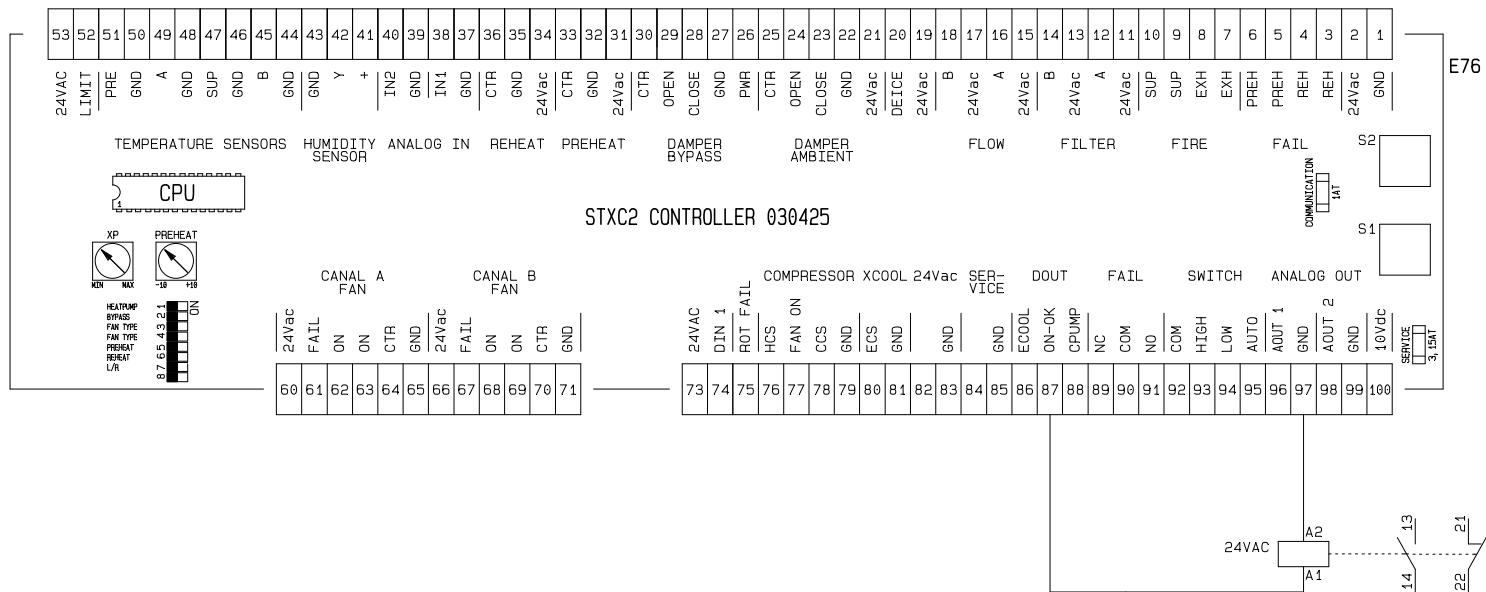
Customer: A/S DANTHERM
 Item: OPTION - RECOUPERATOR DE-ICING
 Project title: VentC 6
 Designer:

Customer ref.:

Revision:
 Page revision:
 Printed: 02-06-2005
 Changed: 28-08-2008

Dantherm no.:
905306
 Page: 27 of 34





STXC2 CONTROLLER 030425

A/S Dantherm

Jægstрупvej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM

Item: OPTION - FANS ON SIGNAL

Project title: VentC 6

Designer:

Customer ref.:

Revision:

Page revision:

Printed: 02-06-2005

Changed: 28-08-2008

Dantherm no.:

905306

Page: 29 of 34

Example on connecting the communication module STIO.

DIGITAL OUTPUTS:

- D01: Unit runs in AUTO (STCU).
- D02: Unit runs in manual mode.
Function switch, STIO or STCU.
- D03: Common non-critical failure (filter dirty).
- D04: Common critical failure (frost, fire,
fan failure or flow failure).
- D05: Heat on (Reheat).
- D06: Heat wheel failure.
- D07: AUX.

ANALOGUE OUTPUTS:

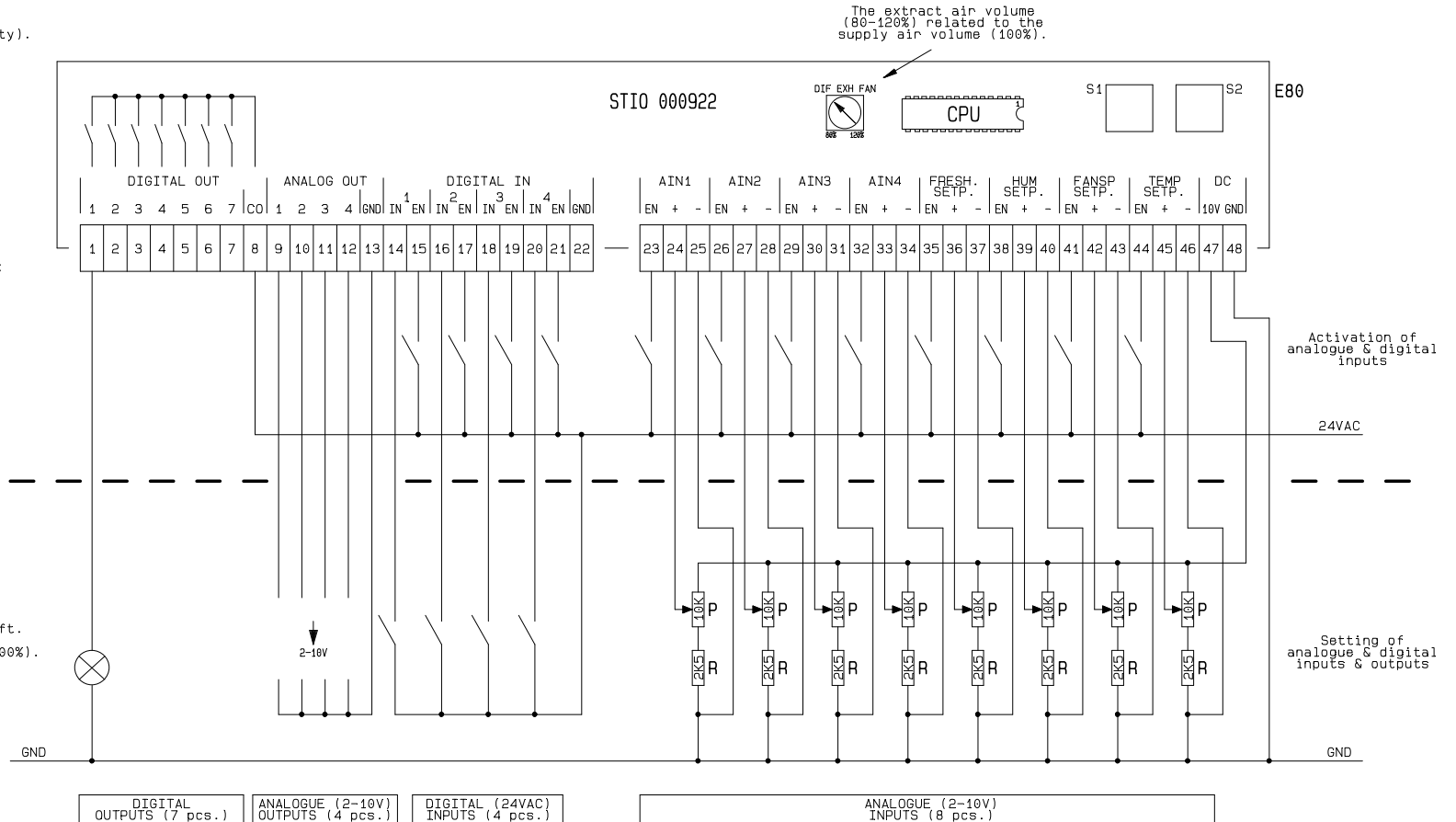
- A01: Return air temperature (2-10V 10-50°C).
- A02: Supply air temperature (2-10V 10-50°C).
- A03: Air volume supply (2-10V 0-2000Pa).
- A04: Analogue input 1 on STXC2 circuit board:
CO₂ pressure in duct or potentiometer
(2-10V 0-100%).

DIGITAL INPUTS:

- DI1: Cooling at summer nights ON.
- DI2: AUX.
- DI3: AUX.
- DI4: Cooling ON.

ANALOGUE INPUTS:

- AI1: AUX1 (2-10V).
- AI2: Minimum supply temperature
(2-10V 15-35°C).
- AI3: External override set point
for fans or set point for
analogue input 1 on STXC2 circuit board
(2-10V 0-100%).
- AI4: Temperature control type (2-10V).
2V = Return air temperature control.
5V = Supply air temperature control.
10V = Automatic temperature control shift.
- AI5: Set point for mixing section (2-10V 0-100%).
- AI6: Humidity set point (2-10V 40-70%RH).
- AI7: Fan set point (2-10V 0-830).
- AI8: Temperature set point (2-10V 10-50°C).



A/S Dantherm

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Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM
Item: OPTION - COMMUNICATION MODULE STIO
Project title: VENT C 6
Designer:

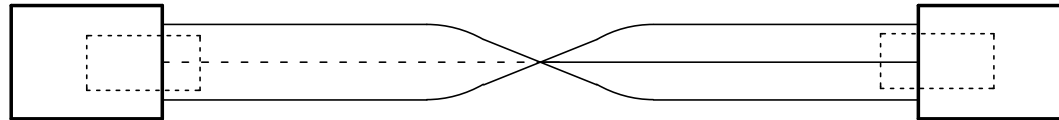
Customer ref.:

Revision:
Page revision:
Printed: 02-06-2005
Changed: 02-06-2005

Dantherm no.:
905306
Page: 30 of 34

Connecting cable between STXC2 & STCU

STXC2 030425
E76

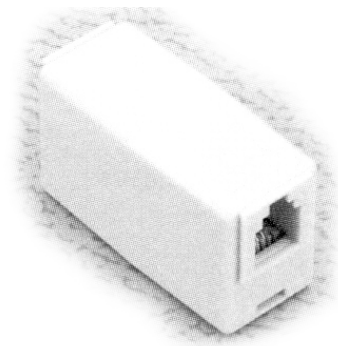


WHITE
black
RED
Green on
YELLOW
blue

blue
YELLOW
Green on
RED
black
WHITE

STCU 000517
E75

DISPLAY/
REMOTE
control



Modular adapter used for lengthening the existing 10m cable between STCU and the control circuit board STXC2 with extra 25m cable (Option).

Components:

AARHUS RADIO LAGER A/S
A.R.L. TRADING A/S

021029
C606 6 ledet tlf. kabel, hvid

008775
TZB 402 6/6 AMK. tlf. stik
S030089 RJ 12

010912
TZB 811 crimplang 6/6 tlf.
S045768

A/S Dantherm

Jegstrupvej 4, DK - 7800 Skive
Tel. +45 97 52 41 44
Fax. +45 97 52 61 34

Customer: A/S DANTHERM
Item: CONNECTING CABLE
Project title: VentC 6
Designer:

Customer ref.:

Revision:

Page revision:

Printed: 02-06-2005

Changed: 17-03-2004

Dantherm no.:

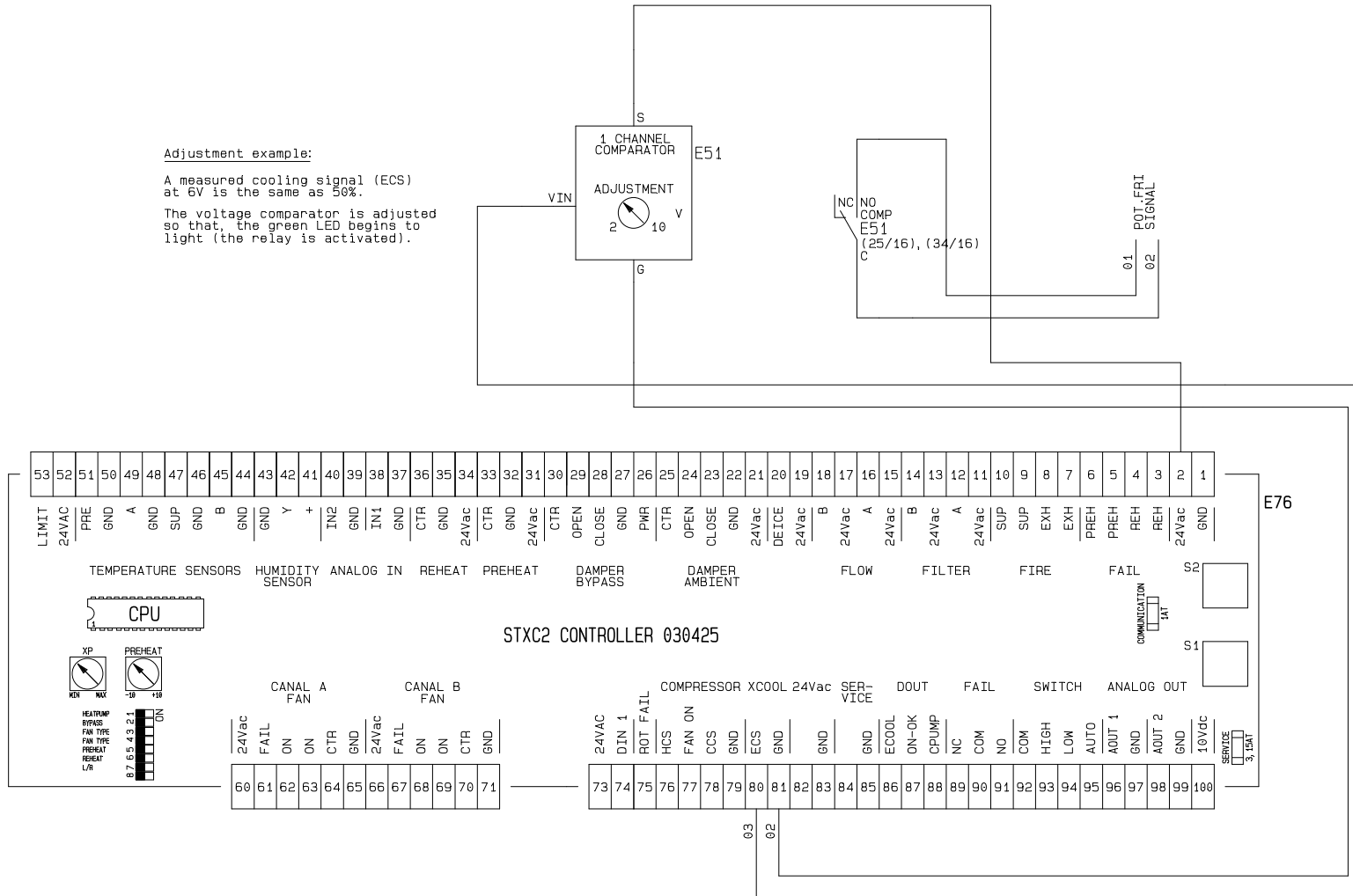
905306

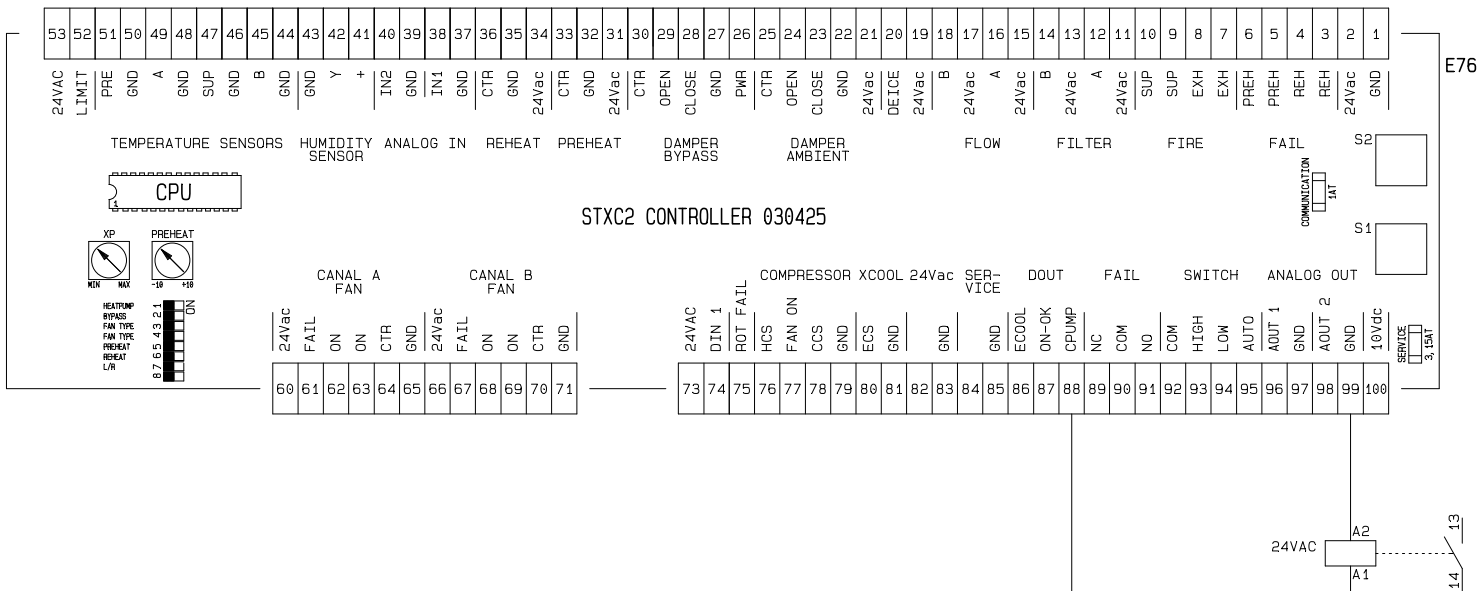
Page: 32 of 34

Adjustment example:

A measured cooling signal (ECS) at 6V is the same as 50%.

The voltage comparator is adjusted so that, the green LED begins to light (the relay is activated).





A/S Dantherm
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 Tel. +45 97 52 41 44
 Fax. +45 97 52 61 34

Customer: A/S DANTHERM
 Item: OPTION : START SIGNAL TO PUMP FOR REHEATER LPHW
 Project title: VentC 6
 Designer:

Customer ref.:

Revision:
 Page revision:
 Printed: 02-06-2005
 Changed: 28-08-2008

Dantherm no.:
905306
 Page: 34 of 34