

KKT chillers

Stromlaufplan


wiring diagram

UL Verdrahtung
UL wiring

Projekt project	909070-00249 ab 9070756	
Anlage / Typ sub-group / type	cBoxX 70	
Änderung / change	Datum / Date	Name / Editor
-20F1 und -20F2 --> 3RV2011-1HA10 --> 5,5-8A	01.07.2016	rze

drawn with ELCAD (R)

Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
All lines without cross-sectional specification are H05V-K 0,75 mm²

c			date	06.07.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram cBoxX 70 GES.CBX070J.27	909070-00249 ab 9070756	Art. Nr. 61382501	=	+	sheet 1
b			editor	R.Zeilmann								
a			check									
change	date	name	norm		replacement by:	replacement for:	origin:	KKT	Deckblatt / cover		sh. 24	

Achtung !

Vor Inbetriebnahme - alle Schrauben an Schützen , Klemmen , Relais und Reglern nachziehen.

Attention

before first initial operation starting - tighten all screws on contactors , relais , terminals and controller.


Netzspannung / line	460V (±10% / 3~ / PE / 60Hz)
Schutzart / protection class	IP 54
Steuerspannung / control voltage	24V / DC
Anschlußleistung / connected load	ca. 29 kW / 35 kVA
Stromaufnahme / max. current	ca. 45 A
Vorsicherung / max. overcurrent protective device (OCP)	80 A
max. Einschaltstrom / inrush amps	117 A

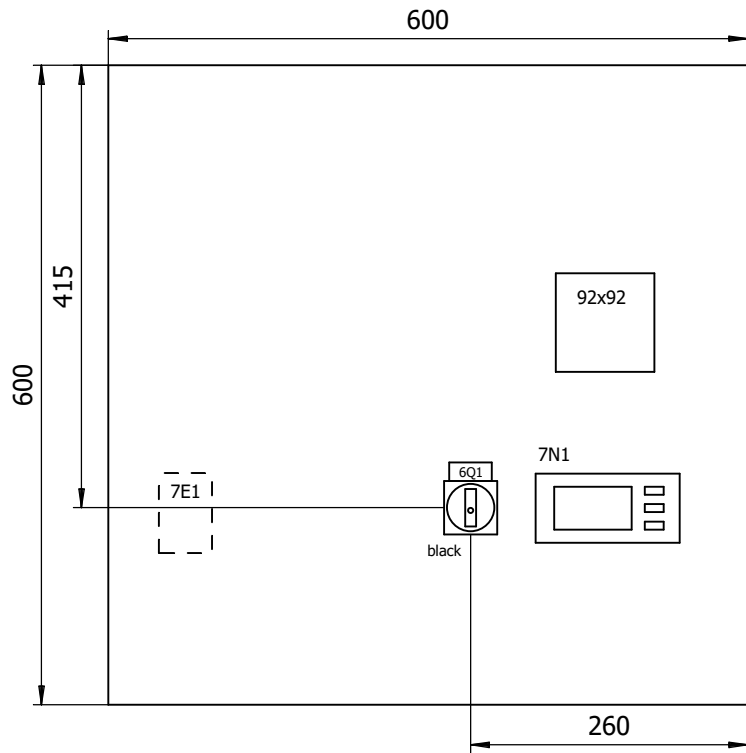
Drahtfarben / colors of wiring :

Hauptstromkreise / main power : schwarz / black
 Schutzleiter / protective conductor : grün-gelb / green-yellow
 Steuerspannung / control voltage 24VDC+ : dunkelblau / darkblue
 Steuerspannung / control voltage 24VDC- : dunkelblau-weiß / darkblue-white
 Fühlerleitung / sensor conductor: weiß / white
 Pot.-freie Verdrahtung / wiring without potential : orange / orange

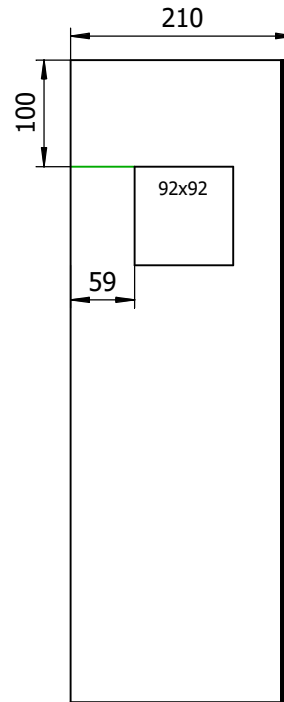
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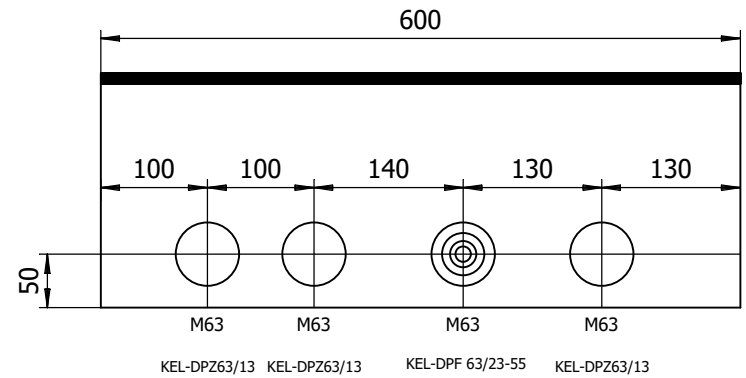
c			date	06.07.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram	909070-00249 ab 9070756	technische Daten / technical data	sheet 2
b			editor	R.Zeilmann			cBoxX 70			sh. 24
a			check				GES.CBX070J.27			
change	date	name	norm		replacement by:	replacement for:	origin:	KKT		



Ansicht Frontseite
view front



Ansicht links
view left



Ansicht unten
view down

Gehäuse / Cabinet

600x600x210


Farbe / color : RAL 7016-301

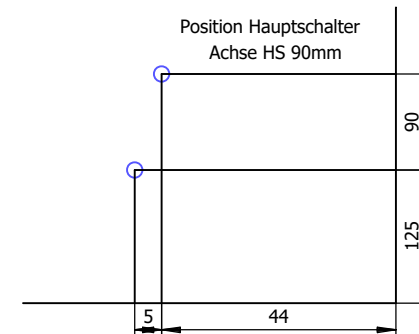
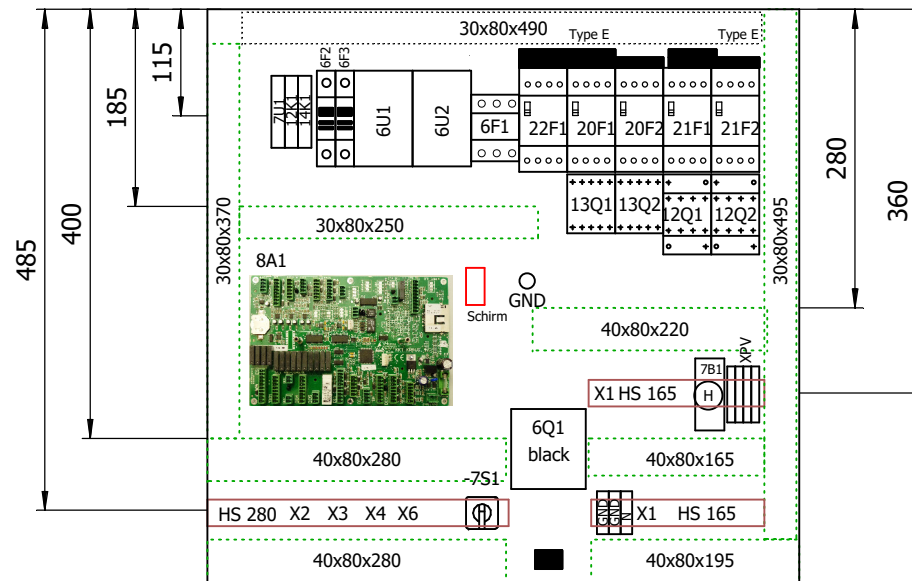
Schilder / label : deutsch / englisch

Alle Maße in mm

drawn with ELCAD (R)

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c			date	06.07.2016	KKT chillers - a brand of ait - deutschland GmbH		construction plan cBoxX 70 GES.CBX070J.27	909070-00249 ab 9070756	sheet 3
b		editor	R.Zeilmann						
a		check							
change	date	name	norm	replacement by:	replacement for:	origin:	KKT	Ansicht / view	sh. 24




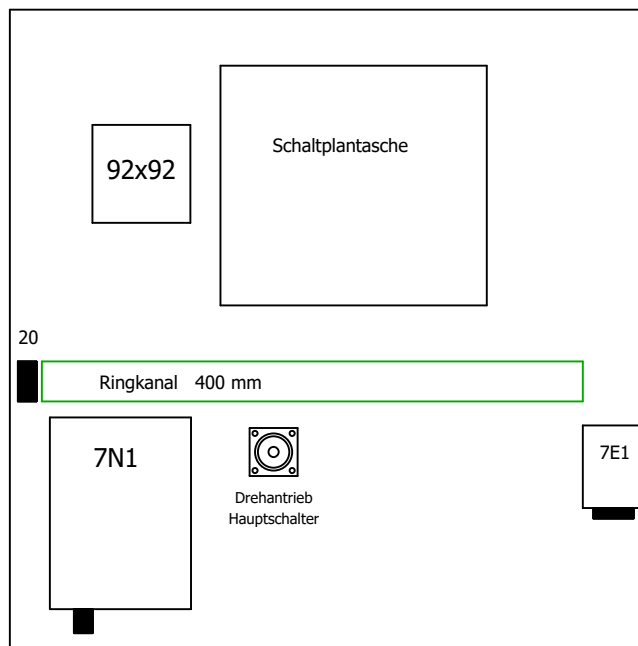
Aufbau Montageplatte
 view mounting plate

Alle Maße in mm

drawn with ELCAD (R)

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b		editor	R.Zeilmann	sh.						24	
a		check									
change	date	name	norm	replacement by:	replacement for:	origin:	KKT				



Aufbau Tür innen
view inside of the door

drawn with ELCAD (R)

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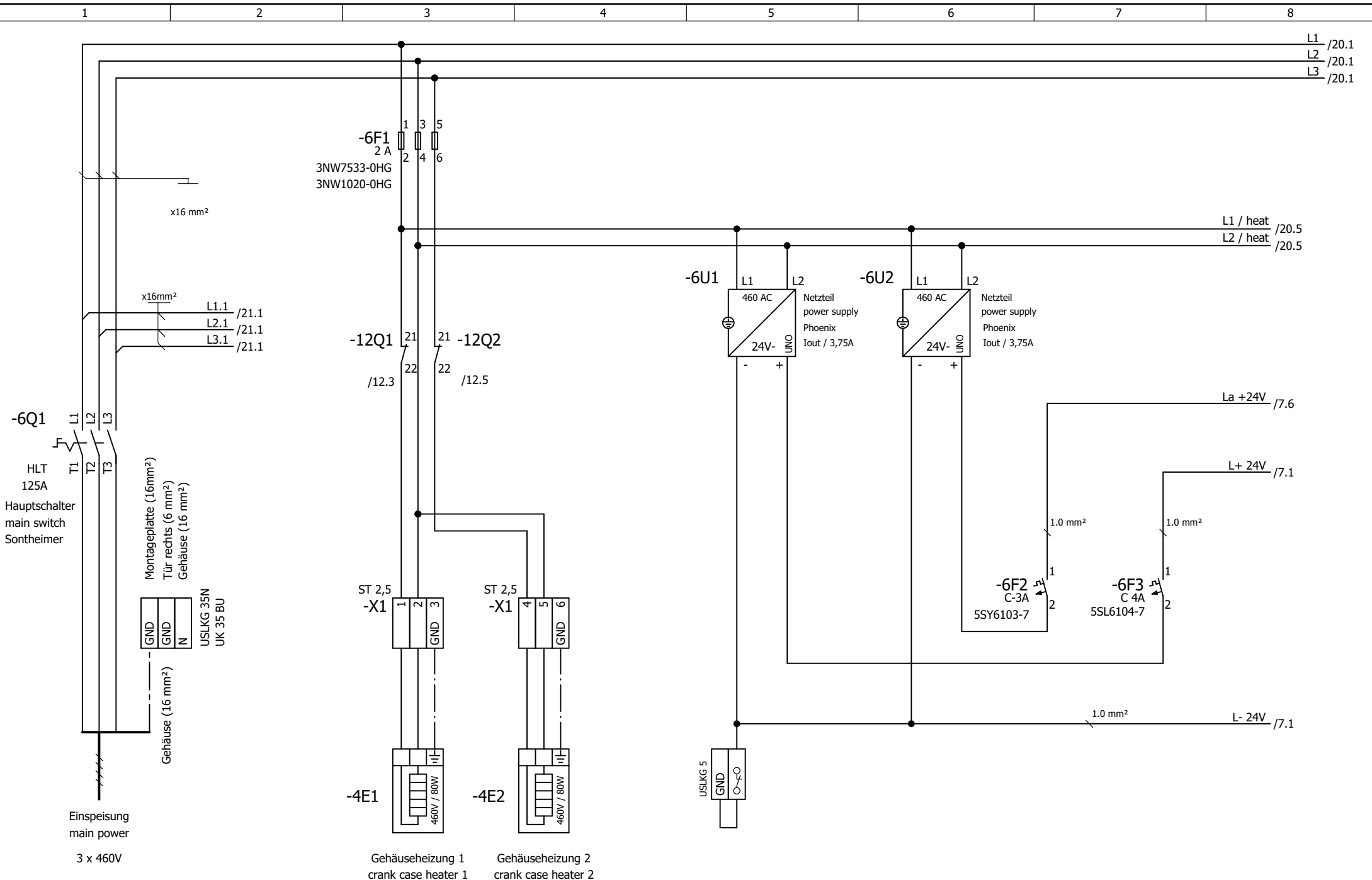
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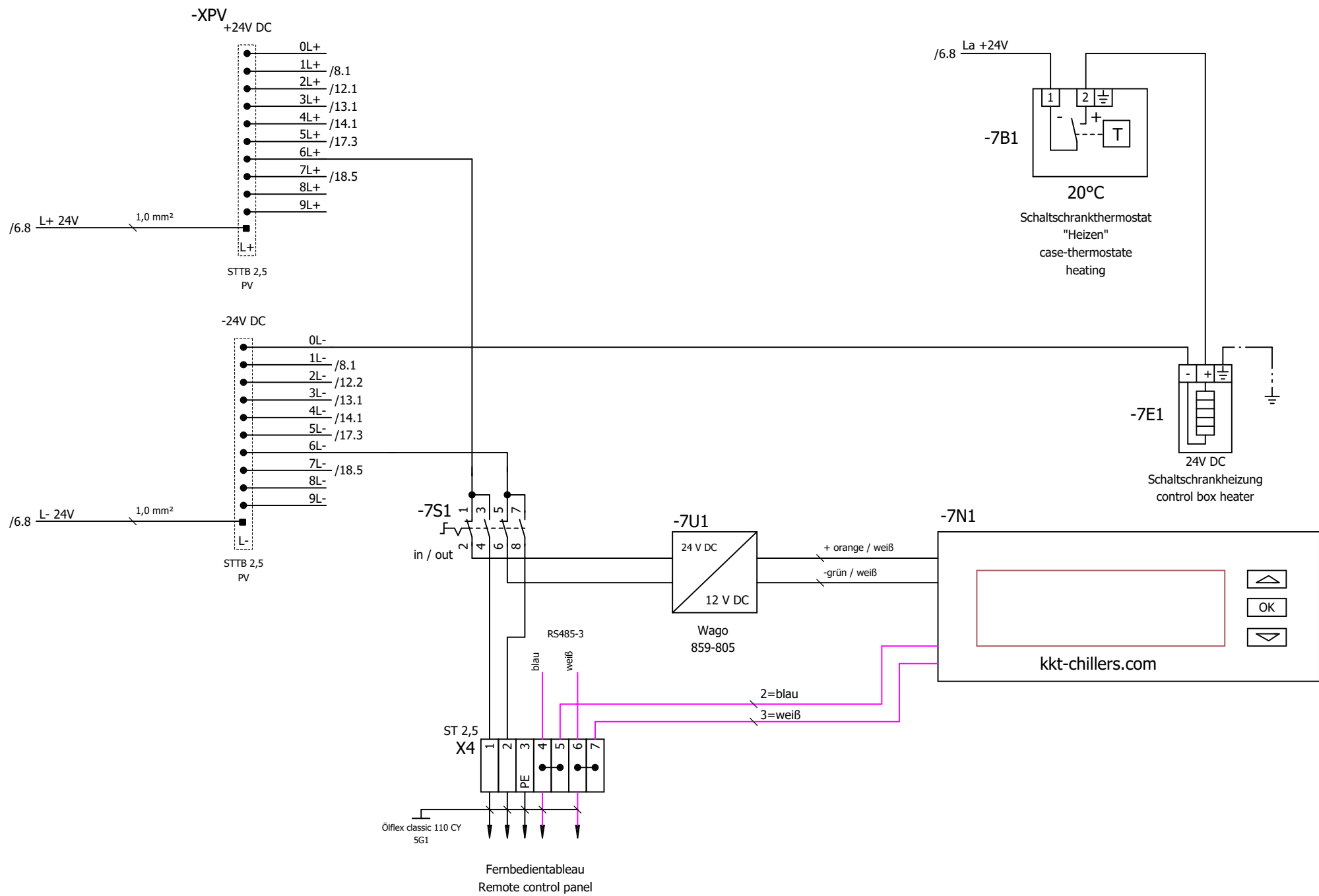
KKT chillers - a brand of ait - deutschland GmbH	
replacement by:	replacement for:



construction plan	909070-00249 ab 9070756
cBoxX 70	
GES.CBX070J.27	
origin:	KKT

Ansicht Platine / view PCB





drawn with ELCAD (R)

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a		check	
change	date	name	norm

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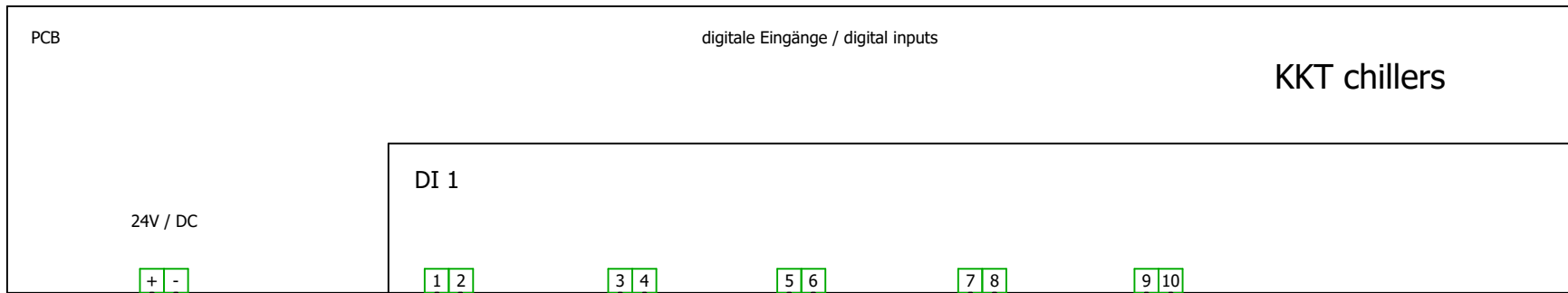
wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Pot. Verteiler / power unit 24VDC

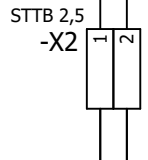
sheet 7
sh. 24

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-8A1



/7.2 1L+
/7.2 1L-




1 = work
0 = stop

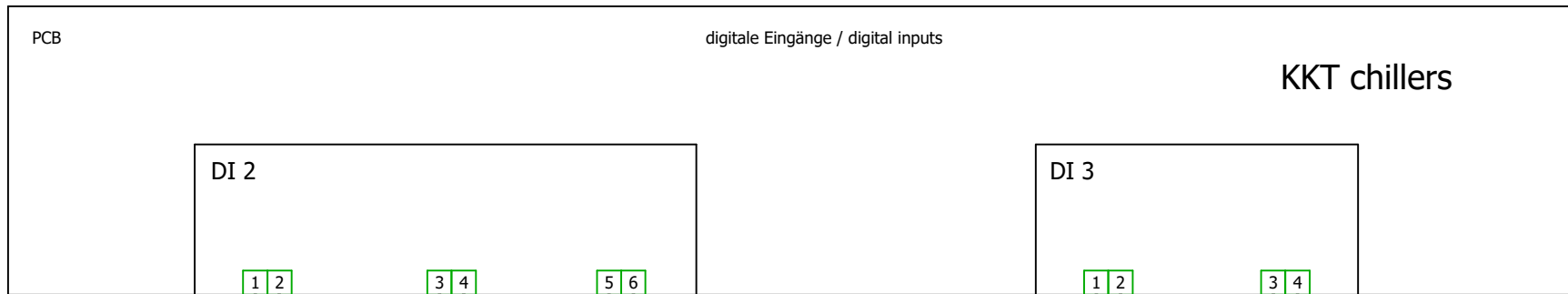
Fernsteuerung
remote control

drawn with ELCAD (R)

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c			date	06.07.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram cBoxX 70 GES.CBX070J.27	909070-00249 ab 9070756	Platine digitale Eingänge / PCB digital input	sheet 8
b		editor	R.Zeilmann	sh. 24						
a		check								
change	date	name	norm	replacement by:	replacement for:	origin:	KKT			

-8A1




MSS Pumpe 1
 Verbraucher
 Motor protection switch
 consumers pump 1

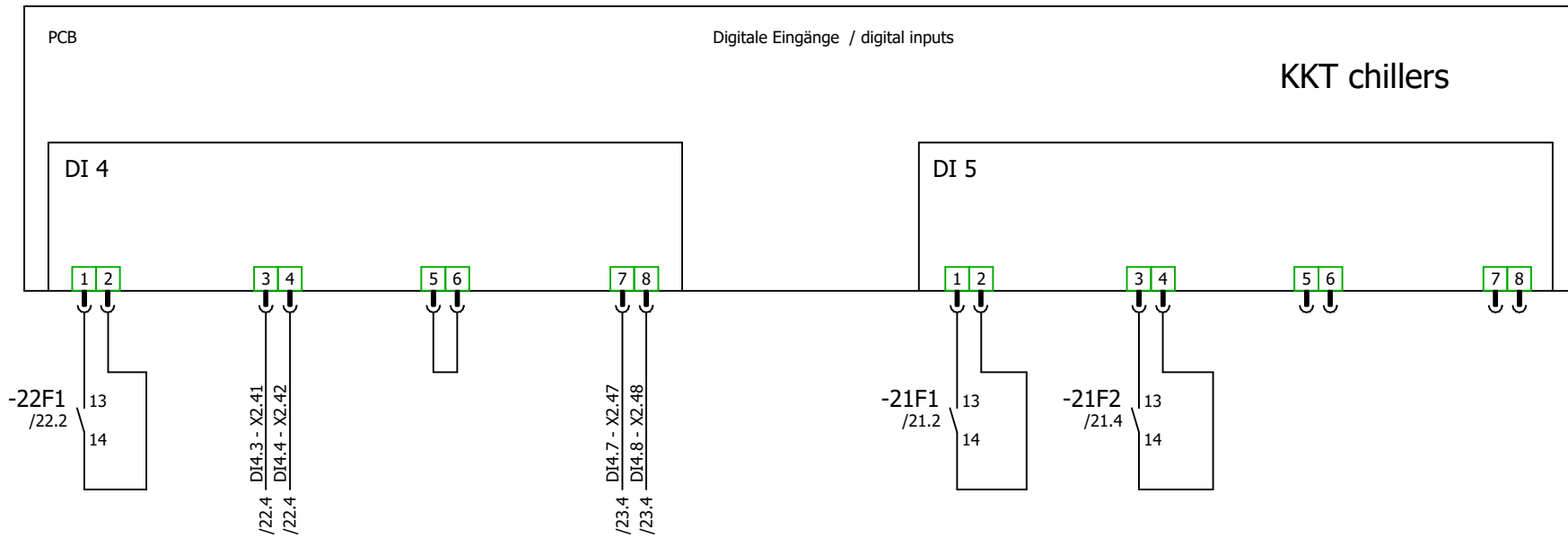
MSS Pumpe 2
 Verbraucher
 Motor protection switch
 consumers pump 2

drawn with ELCAD (R)

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b		editor	R.Zeilmann	sh. 24						
a		check								
change	date	name	norm	replacement by:	replacement for:	origin:	KKT			

-8A1



MMS Lüfter 1
Circuit breaker
Fan 1

Störung Lüfter 1
Fault Fan 1


Störung Lüfter 2
Fault Fan 2

MSS
Kompressor 1
circuit breaker
compressor 1

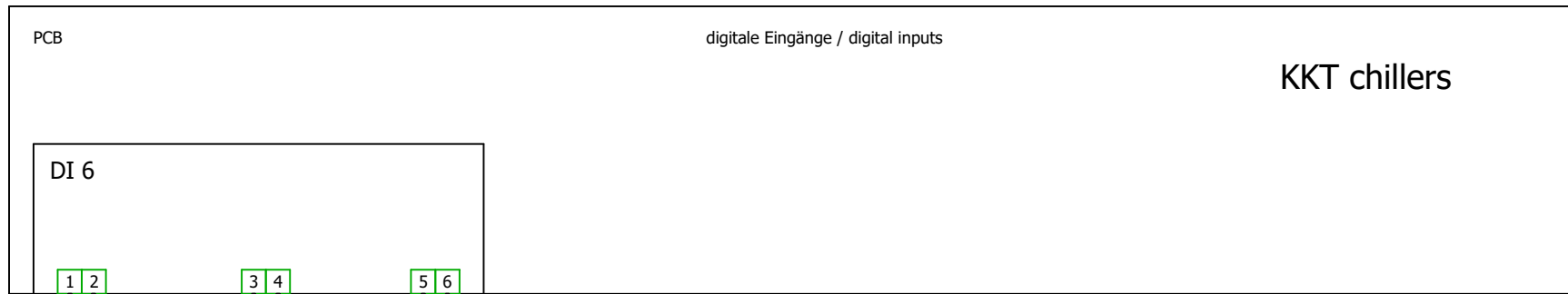
MSS
Kompressor 2
circuit breaker
compressor 2

drawn with ELCAD (R)

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change	date	name	norm	

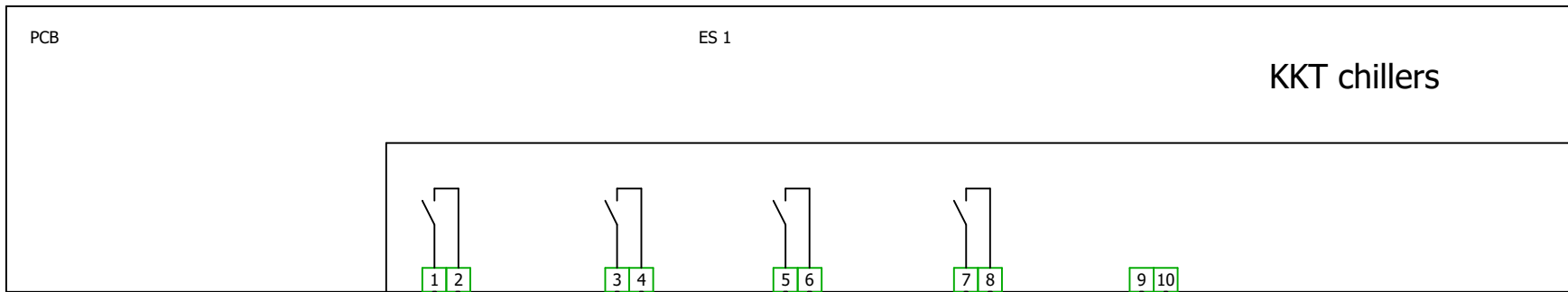
KKT chillers - a brand of ait - deutschland GmbH	
replacement by:	replacement for:



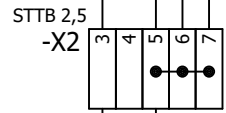
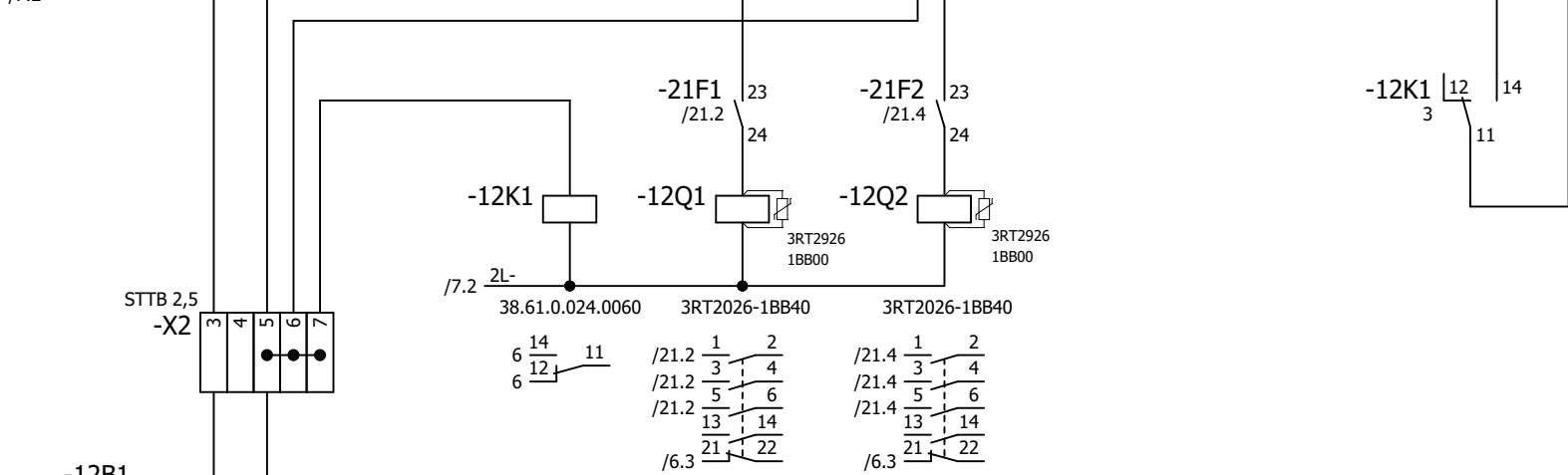
wiring diagram	909070-00249 ab 9070756
cBoxX 70	
GES.CBX070J.27	

Platine digital Eingänge / PCB digital input	
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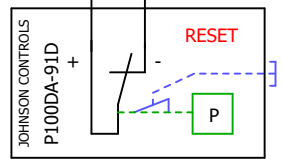
-8A1



/7.2 2L+



-12B1



Hochdruckschalter
high pressure switch

Freigabe Hochdruck
release high pressure

Anforderung
Kompressor 1
requirement
compressor 1

Anforderung
Kompressor 2
requirement
compressor 2

Freigabe Hochdruck
release high pressure

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wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Platine digital Ausgänge / PCB digital output

-8A1

PCB

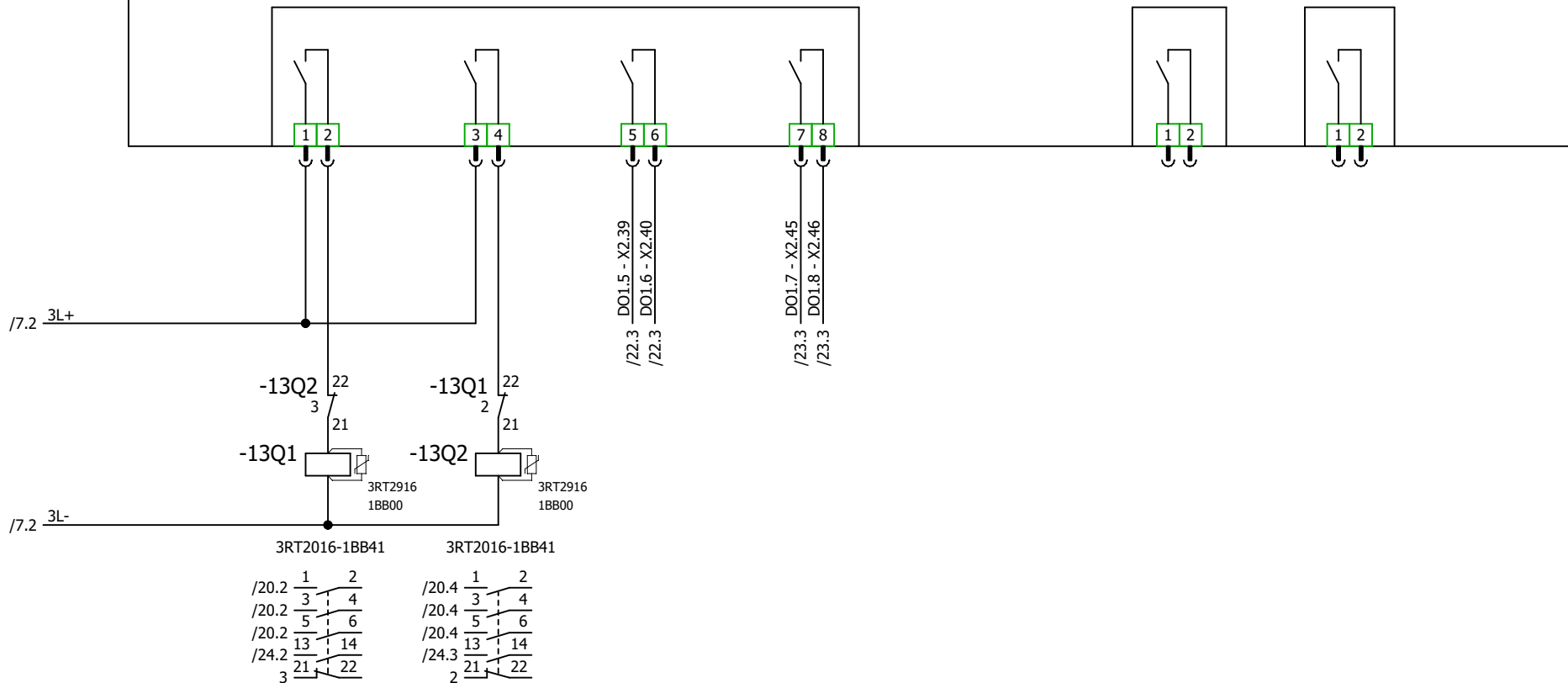
digital Ausgänge / digital outputs

KKT chillers

DO 1

DO 2

DO 3



- Freigabe
Pumpe 1 Verbraucher
release
pump 1 consumer
- Freigabe
Pumpe 2 Verbraucher
release
pump 2 consumer
- FU-Freigabe
Lüfter 1
release inverter
fan 1
- FU-Freigabe
Lüfter 2
release inverter
fan 2

drawn with ELCAD (R)

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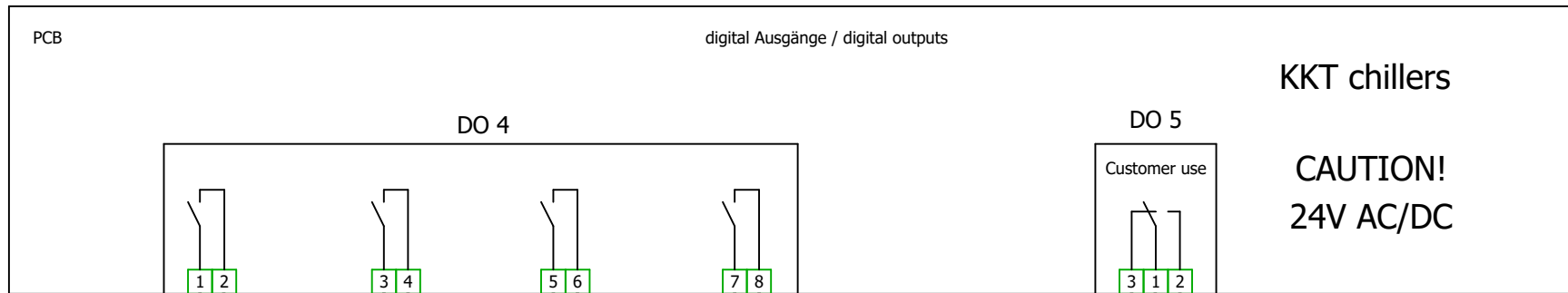
KKT chillers - a brand of ait - deutschland GmbH	
replacement by:	replacement for:



wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Platine digital Ausgänge / PCB digital output

-8A1

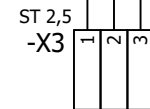
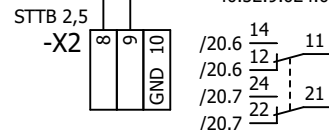


/7.2 4L+ 4L+ /24.2

/7.2 4L- 4L- /24.2

-14K1

40.52.9.024.00.60



1 = work
0 = stop

Heizung Sammler
heater accumulator

Sammelstörung
collective failure

KKT chillers

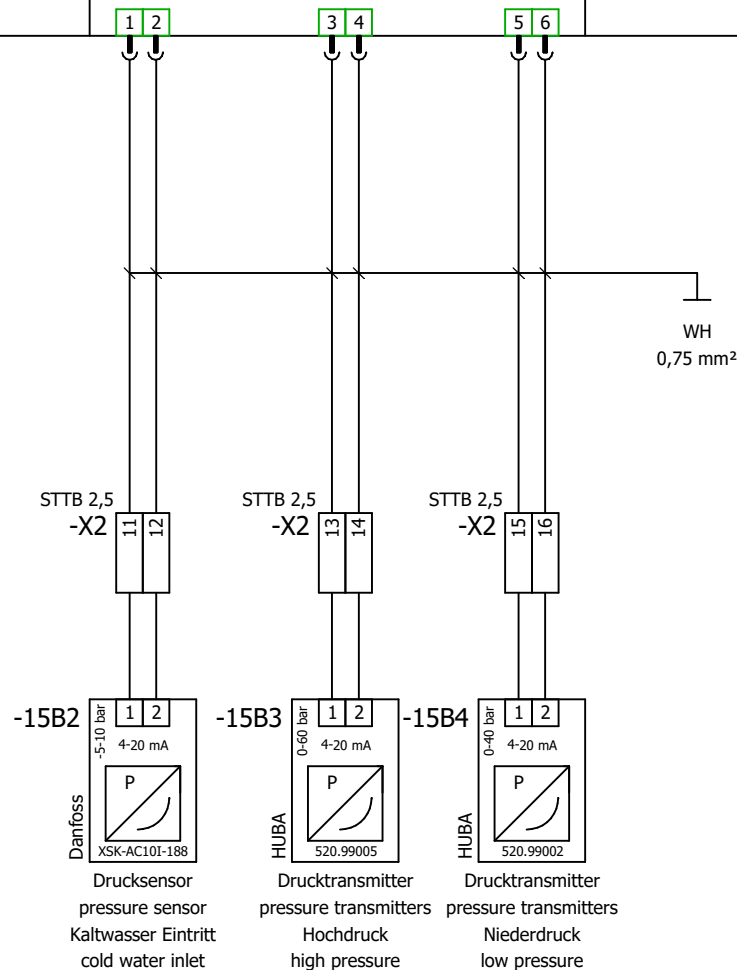
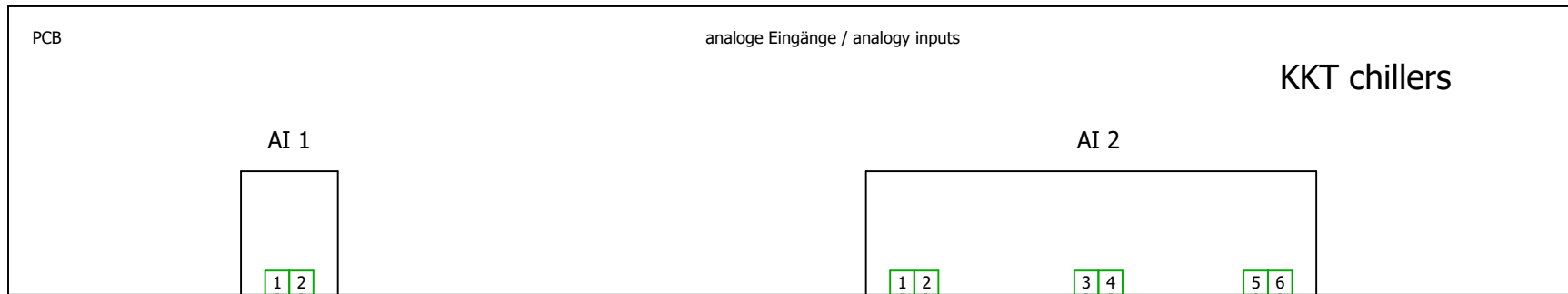
CAUTION!
24V AC/DC

drawn with ELCAD (R)

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a			check				GES.CBX070J.27		
change	date	name	norm		replacement by:	replacement for:	origin:	KKT	Platine digital Ausgänge / PCB digital output

-8A1



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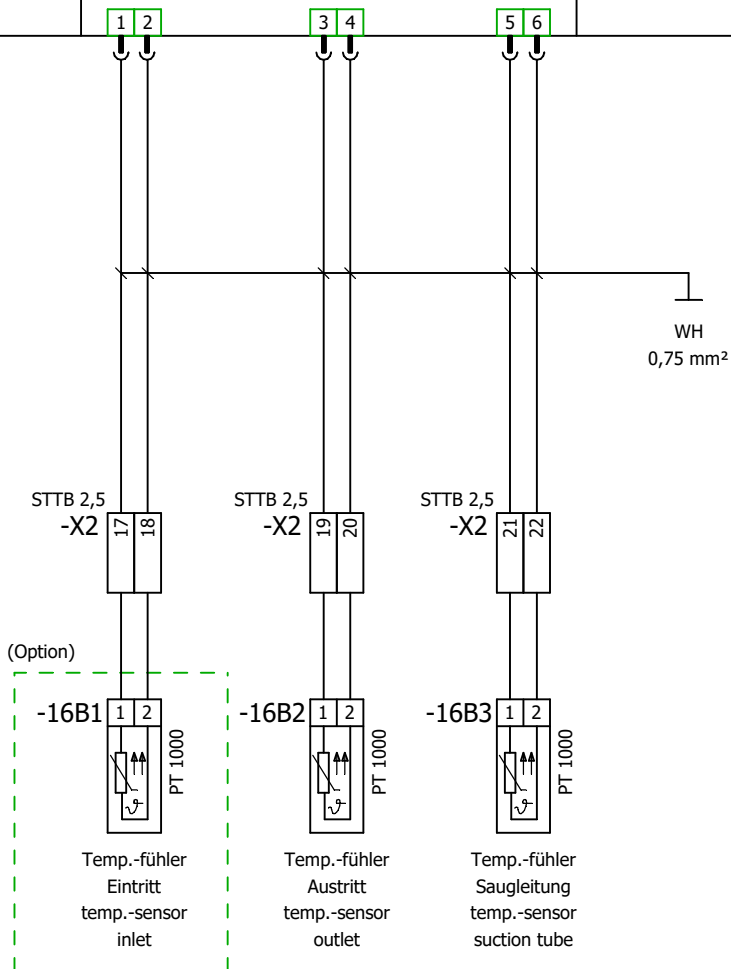
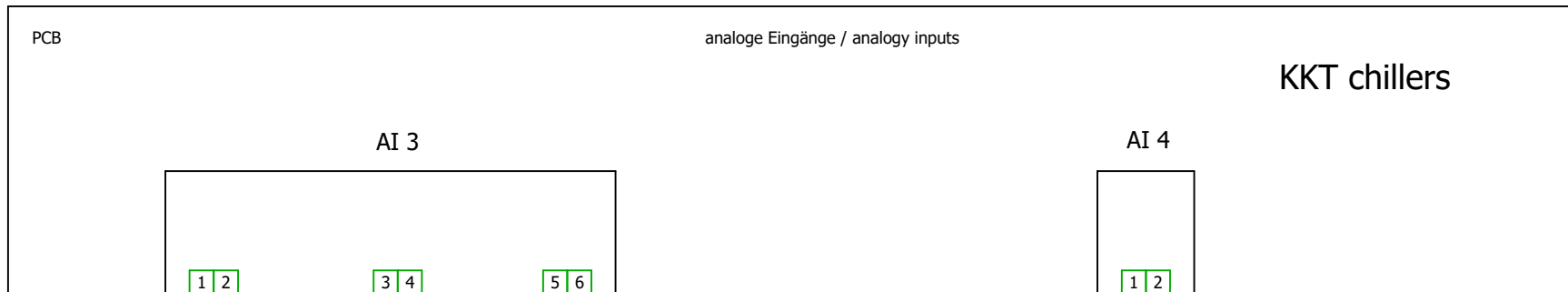
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replacement by:	replacement for:



wiring diagram 909070-00249 ab 9070756
 cBoxX 70
 GES.CBX070J.27

Platine analog Eingänge / PCB analogy input		sheet 15
		sh. 24

-8A1



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change	date	name	norm	

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replacement by: replacement for:

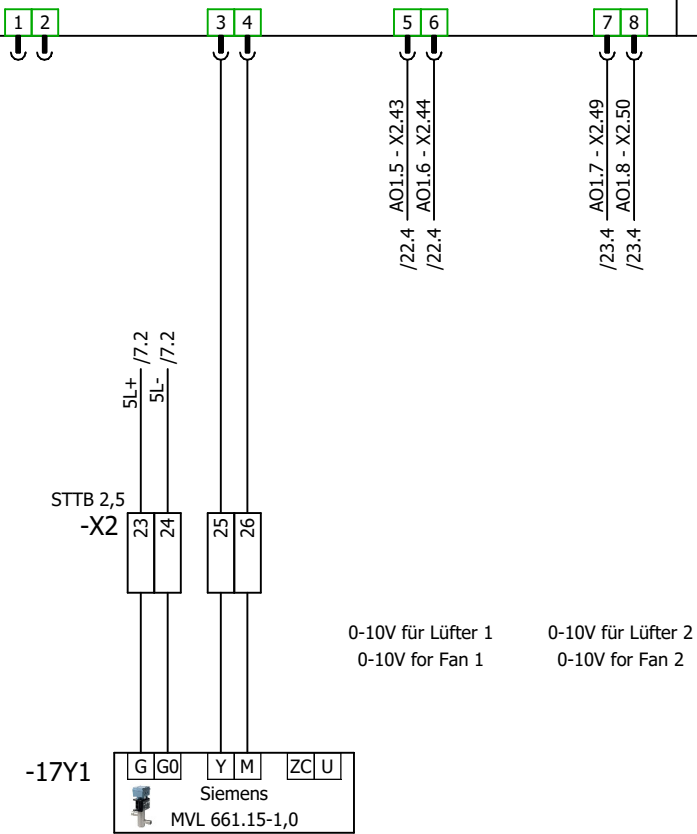
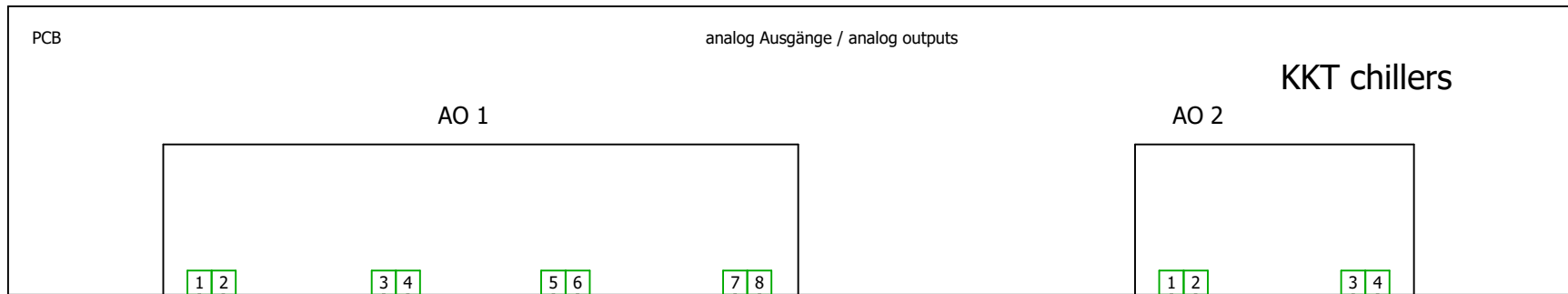


wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

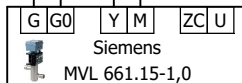
origin: KKT

Platine analoge Eingänge / PCB analogy input

-8A1



-17Y1



Einspritzventil chiller
expansion valve chiller

0-10V für Lüfter 1
0-10V for Fan 1

0-10V für Lüfter 2
0-10V for Fan 2

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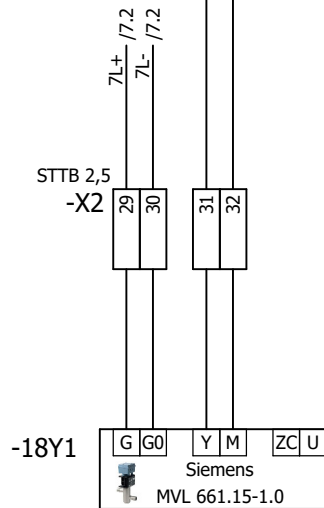
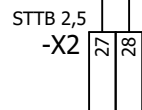
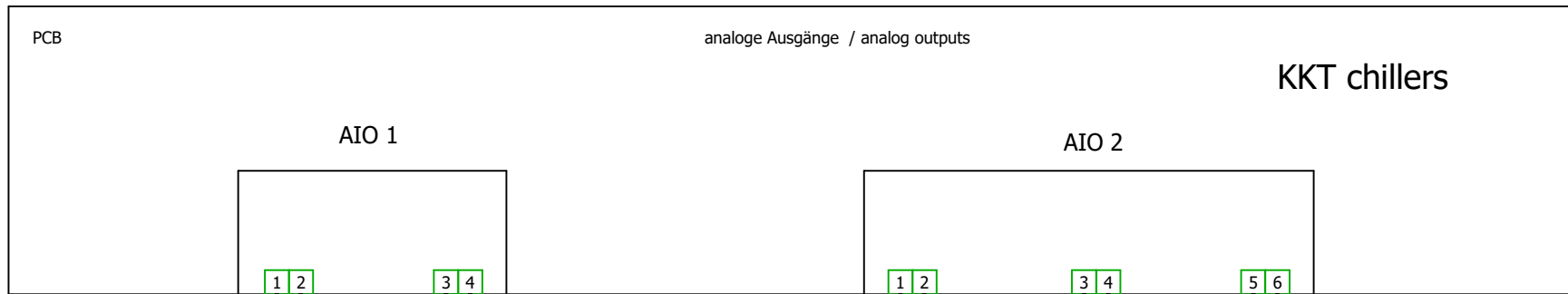
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replacement by:	replacement for:

origin: KKT

wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Platine analog Ausgänge / PCB analogy output		sheet 17
		sh. 24

-8A1



Einspritzventil chiller
expansion valve
heißgas bypass
hot gas bypass

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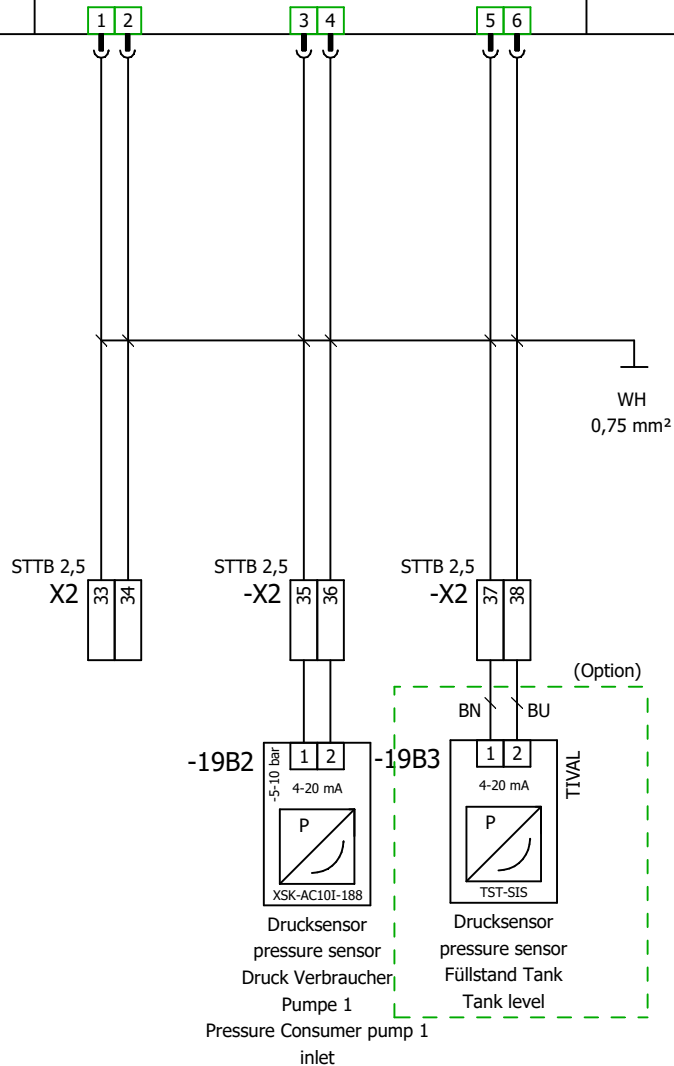
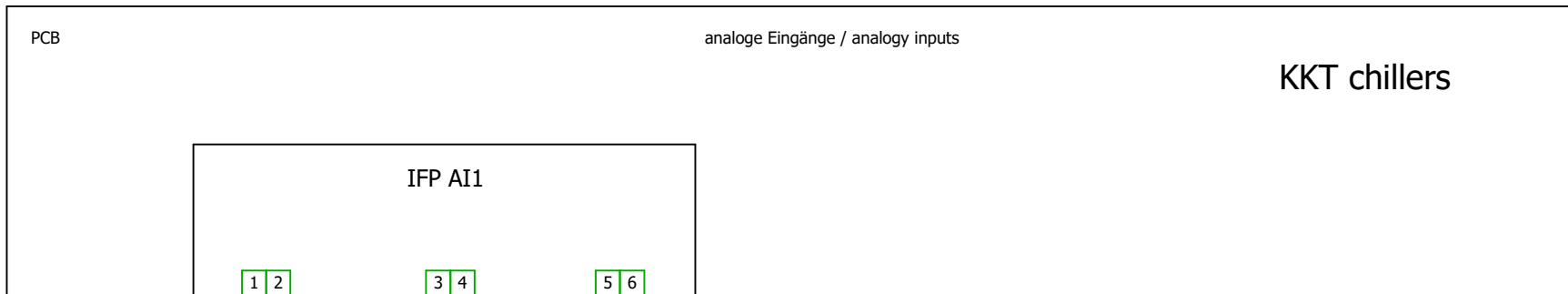
wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

origin: KKT

Platine / PCB Reserve

sheet 18
sh. 24

-8A1



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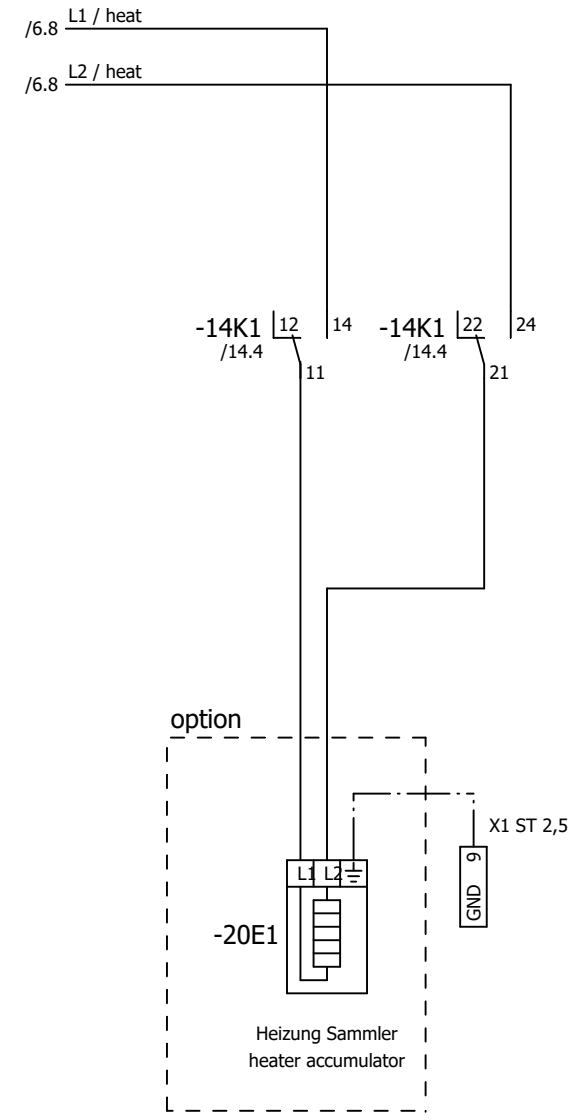
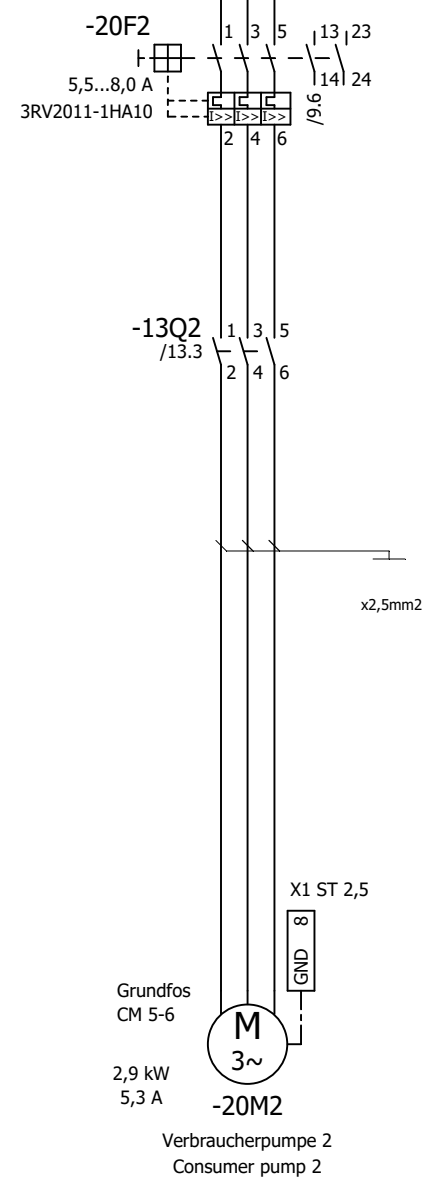
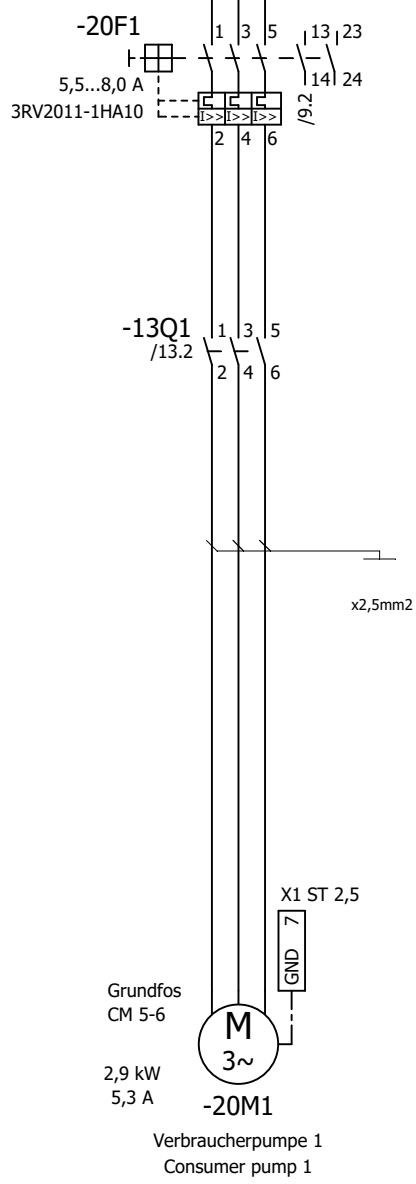


wiring diagram 909070-00249 ab 9070756
 cBoxX 70
 GES.CBX070J.27

Platine analog Eingänge / PCB analogy input		sheet 19
		sh. 24

replacement by: replacement for: origin: KKT

/6.8 L1 /22.1
 /6.8 L2 /22.1
 /6.8 L3 /22.1



drawn with ELCAD (R)

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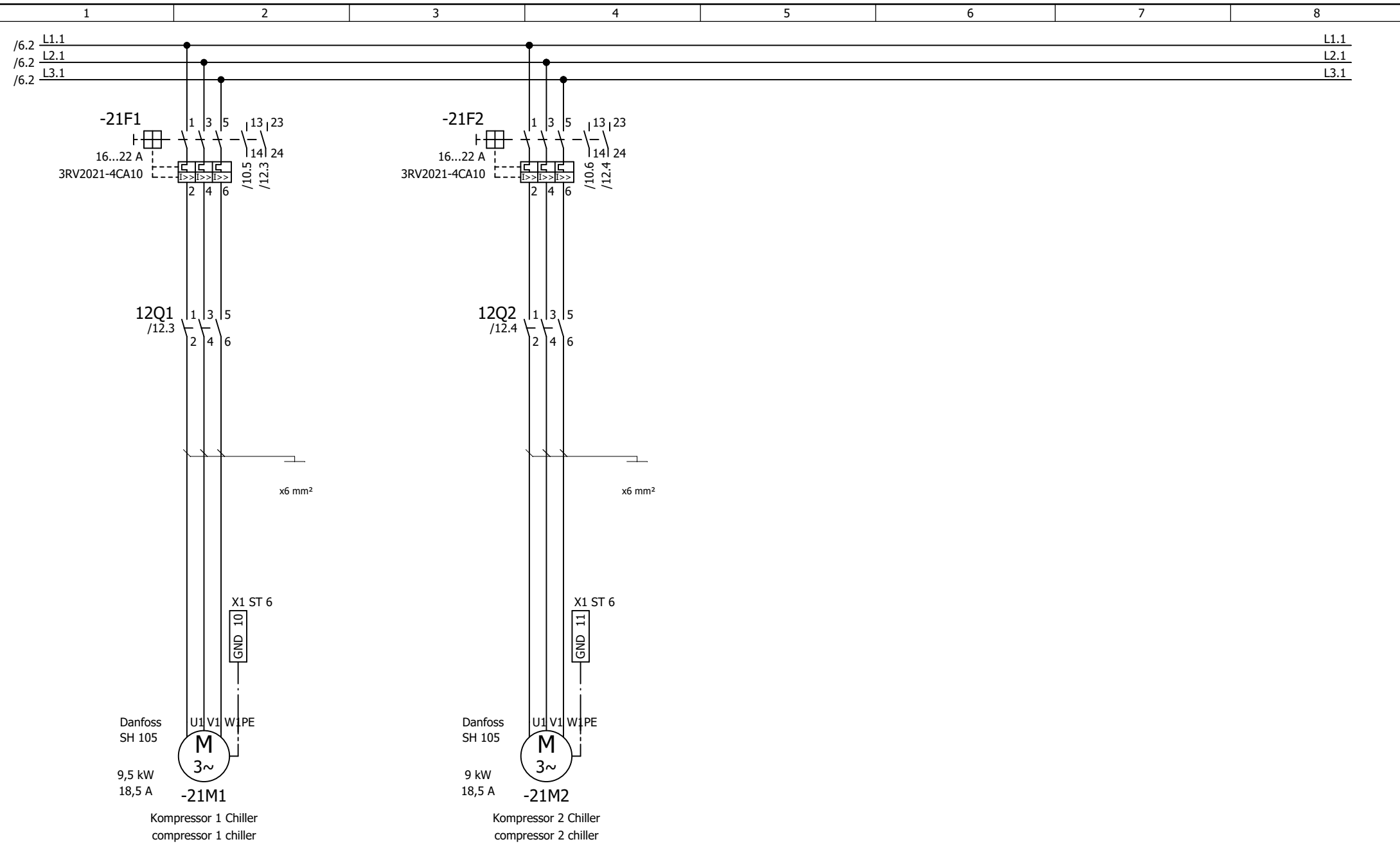
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wiring diagram 909070-00249 ab 9070756
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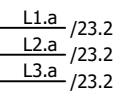
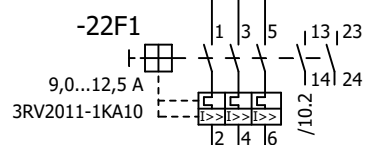
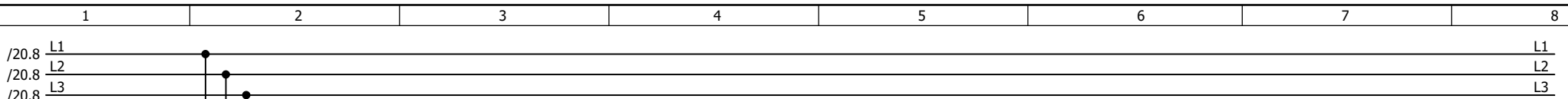
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a		check	
change	date	name	norm

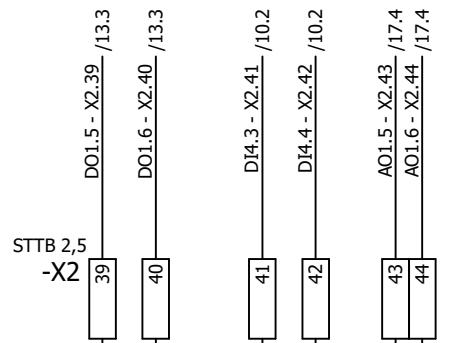
KKT chillers - a brand of
 ait - deutschland GmbH



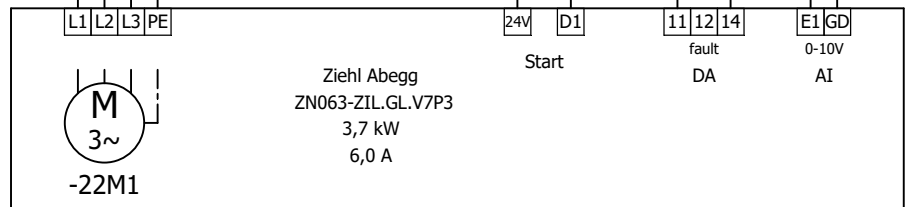
wiring diagram 909070-00249 ab 9070756
 cBoxX 70
 GES.CBX070J.27



x2,5mm²



-22U1



Ziehl Abegg
ZN063-ZIL.GL.V7P3
3,7 kW
6,0 A

Kondensatorlüfter 1
Condenser fan 1

drawn with ELCAD (R)

Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
All lines without cross-sectional specification are H05V-K 0,75 mm²

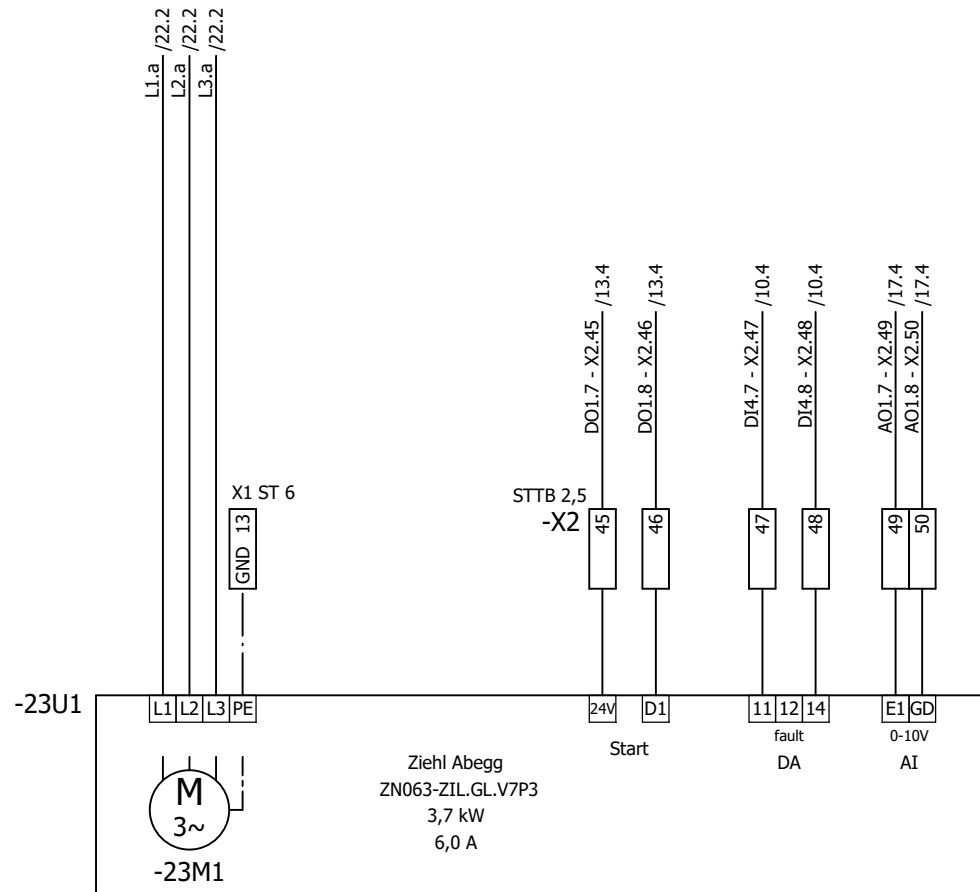
c			date	06.07.2016
b			editor	R.Zeilmann
a			check	
change	date	name	norm	

KKT chillers - a brand of
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wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Kondensatorlüfter / Condenser fan 1



Kondensatorlüfter 2
Condenser fan 2

drawn with ELCAD (R)

Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
All lines without cross-sectional specification are H05V-K 0,75 mm²

c			date	06.07.2016
b			editor	R.Zeilmann
a			check	
change	date	name	norm	

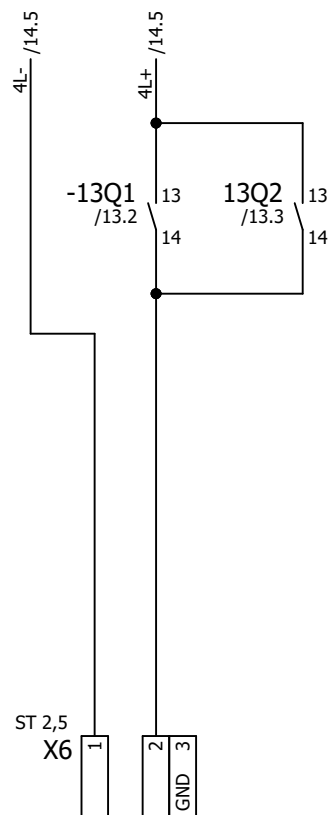
KKT chillers - a brand of
ait - deutschland GmbH



wiring diagram 909070-00249 ab 9070756
cBoxX 70
GES.CBX070J.27

Kondensatorlüfter / Condenser fan 1		sheet 23
		sh. 24


replacement by: replacement for: origin: KKT



option

drawn with ELCAD (R)

Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
 All lines without cross-sectional specification are H05V-K 0,75 mm²

c			date	06.07.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram	909070-00249 ab 9070756	
b		editor	R.Zeilmann				cBoxX 70		
a		check					GES.CBX070J.27		
change	date	name	norm		replacement by:	replacement for:	origin:	KKT	

Motorklappe / motor flap

sheet 24
sh. 24