

KKT chillers

Stromlaufplan


wiring diagram

UL Verdrahtung
UL wiring

Projekt project	909060-00244	
Anlage / Typ sub-group / type	cBoxX 60	
Änderung / change	Datum / Date	Name / Editor
-20F1 und -20F2 --> 4,5-6,3A zu 3,5-5A	24.02.2016	CL
-6F1	24.02.2016	rze
-20F1 und -20F2 --> 3RV2011-1HA10 --> 5,5-8A	01.07.2016	rze
-14K1 A1	12.07.2016	CL
Power consumption and FLA	03.01.2017	CL

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	30.08.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram cBoxX 60 GES.CBX060J.24	909060-00244 ab 9060754	Art. Nr. 61382401	=	+	sheet 1
b			editor	R.Zeilmann								
a			check									
change	date	name	norm		replacement by:	replacement for:	origin:	KKT	Deckblatt / cover		sh. 23	

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. 28.1 kW / 37 kVA
Stromaufnahme / max. current	ca. 42.7 A
Vorsicherung / max. overcurrent protective device (OCP)	60 A
max. Einschaltstrom / inrush amps	111 A

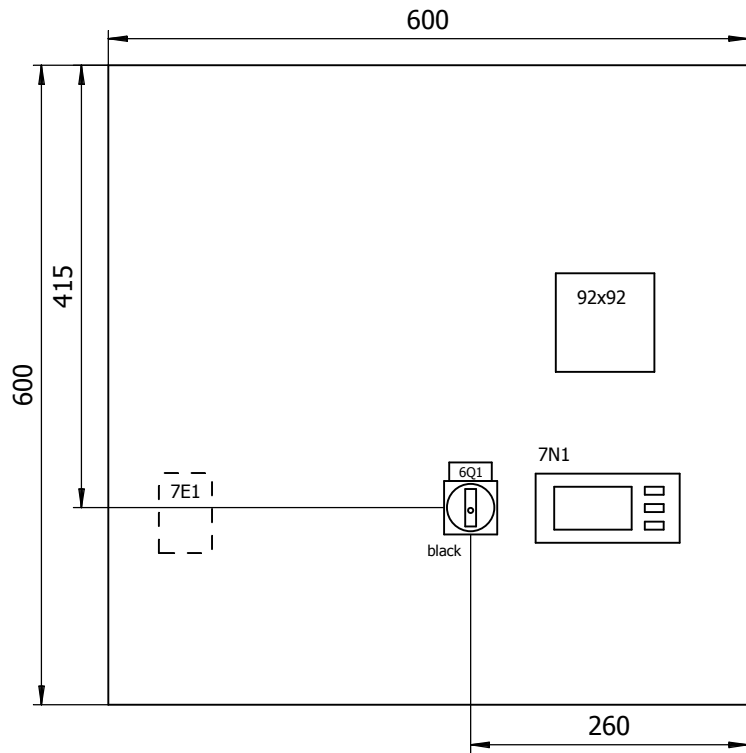
Drahtfarben / colors of wiring :

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

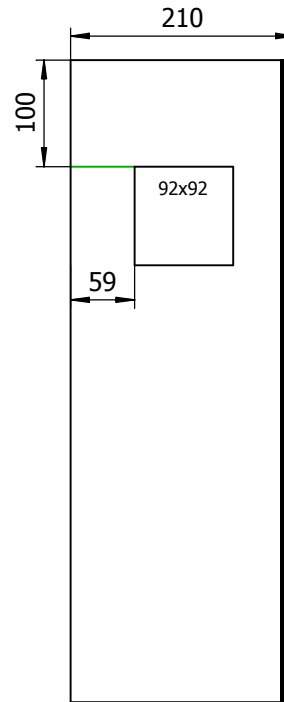
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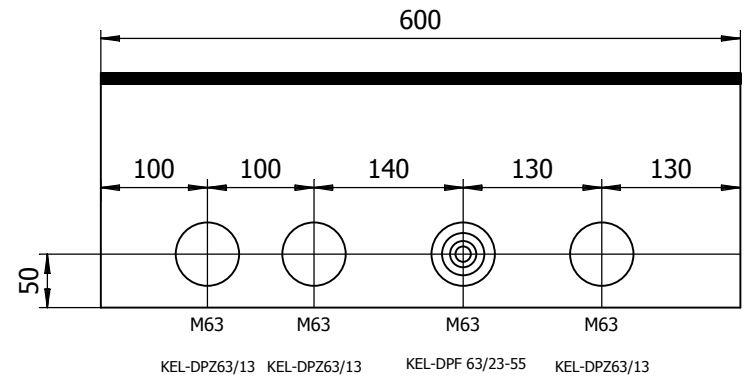
c			date	03.01.2017	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram	909060-00244 ab 9060754	technische Daten / technical data	sheet 2
b			editor	R.Zeilmann			cBoxX 60			sh. 23
a			check				GES.CBX060J.24			
change	date	name	norm		replacement by:	replacement for:	origin:	KKT		



Ansicht Frontseite
view front



Ansicht links
view left



Ansicht unten
view down

Gehäuse / Cabinet

600x600x210


Farbe / color : RAL 7016-301

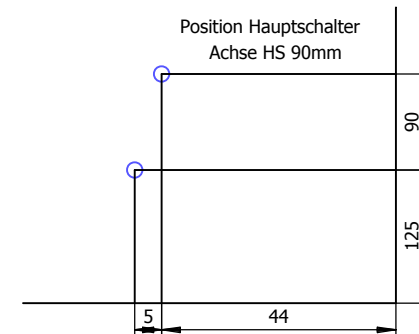
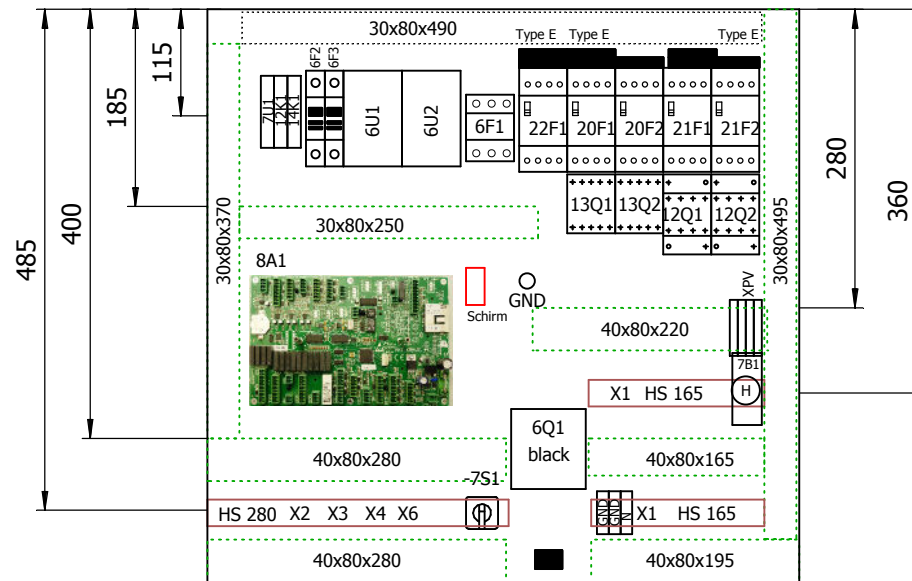
Schilder / label : deutsch / englisch

Alle Maße in mm

drawn with ELCAD (R)

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c			date	30.08.2016	KKT chillers - a brand of ait - deutschland GmbH		construction plan cBoxX 60 GES.CBX060J.24	909060-00244 ab 9060754	sheet 3				
b		editor	R.Zeilmann	replacement by:						replacement for:	origin: KKT	Ansicht / view	sh. 23
a		check											
change	date	name	norm										



Aufbau Montageplatte
view mounting plate

Alle Maße in mm

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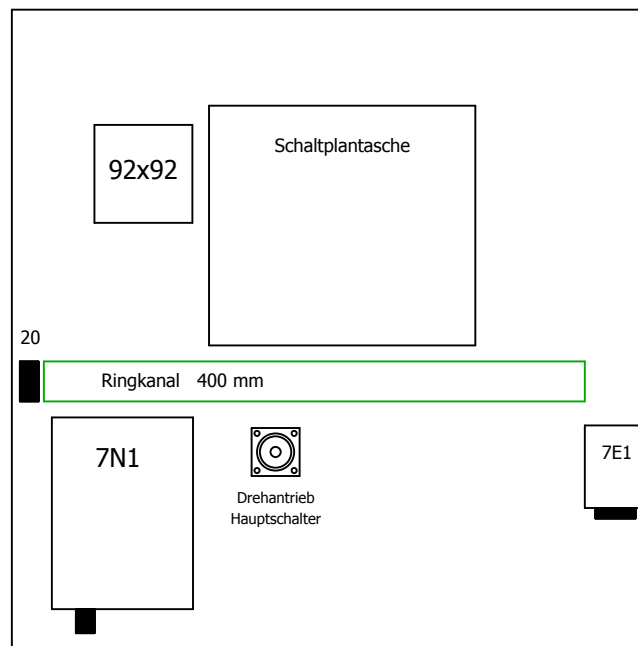
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construction plan	909060-00244 ab 9060754
cBoxX 60	
GES.CBX060J.24	

Aufb. Montageplatte / view mounting plate	
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sheet	4
sh.	23



Aufbau Tür innen
view inside of the door

drawn with ELCAD (R)

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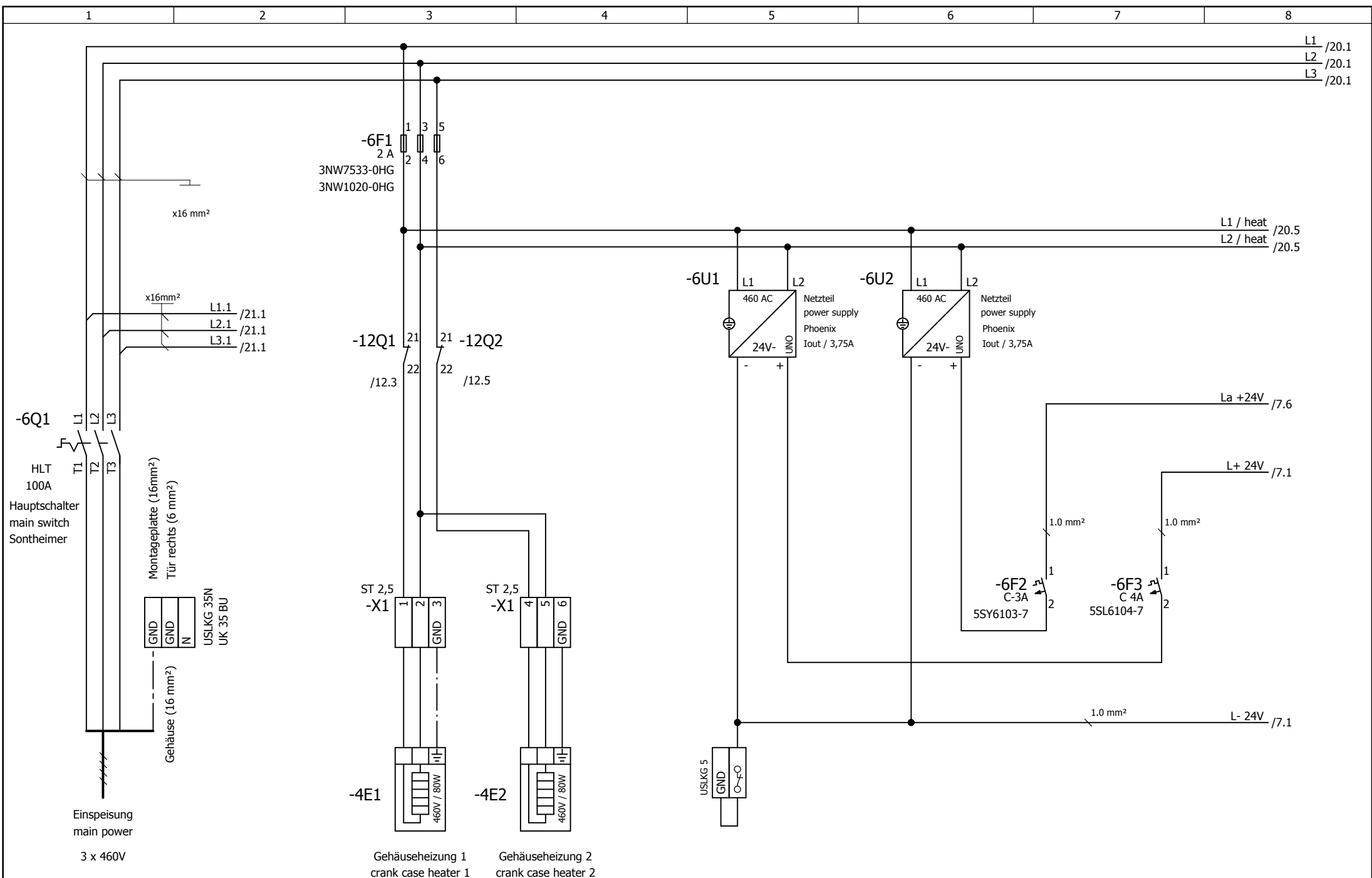
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replacement by:	replacement for:



construction plan	909060-00244 ab 9060754
cBoxX 60	
GES.CBX060J.24	
origin:	KKT

Ansicht Platine / view PCB



drawn with ELCAD (R)

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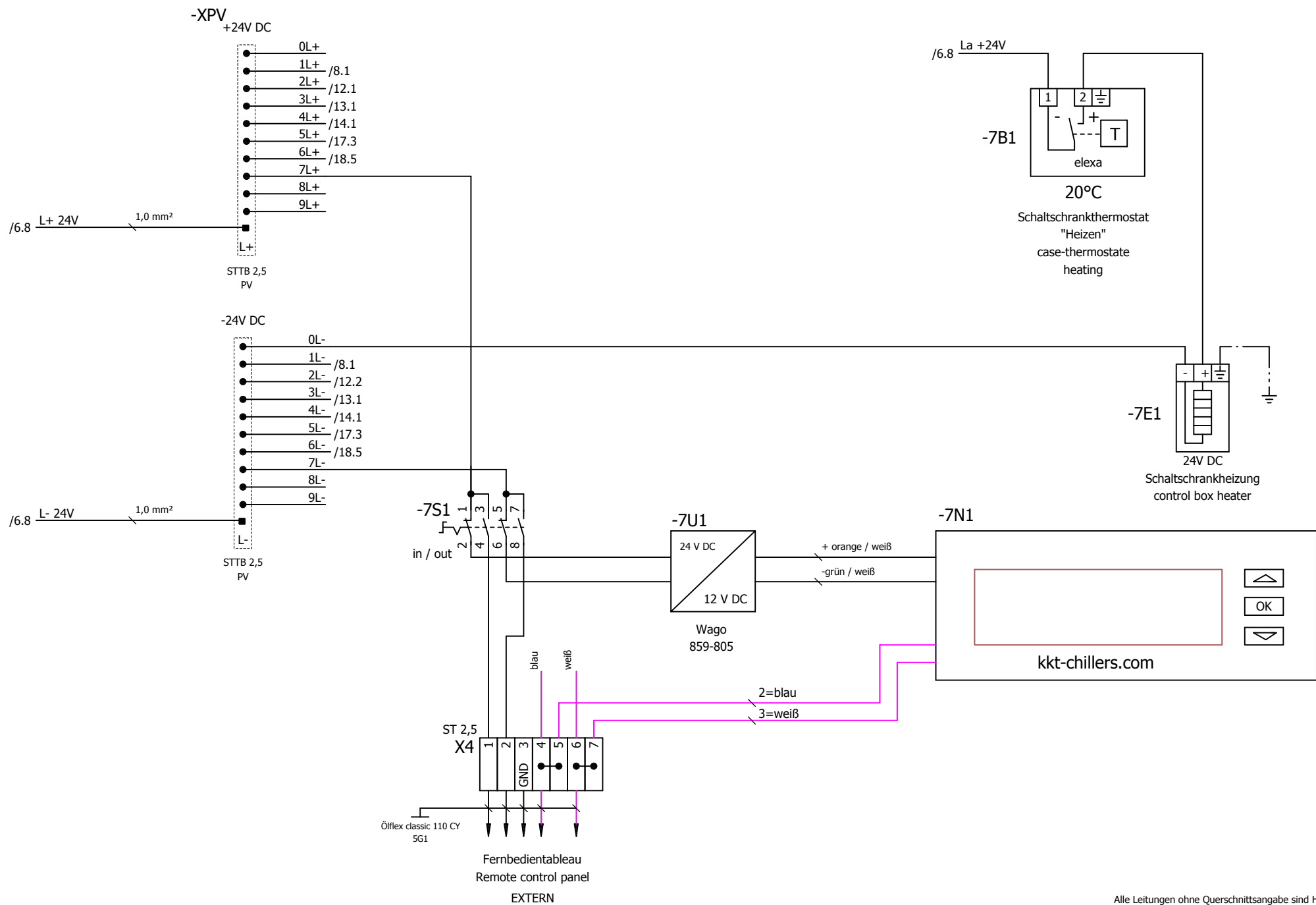
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wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

Einspeisung / power supply		sheet 6
		sh. 23

Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
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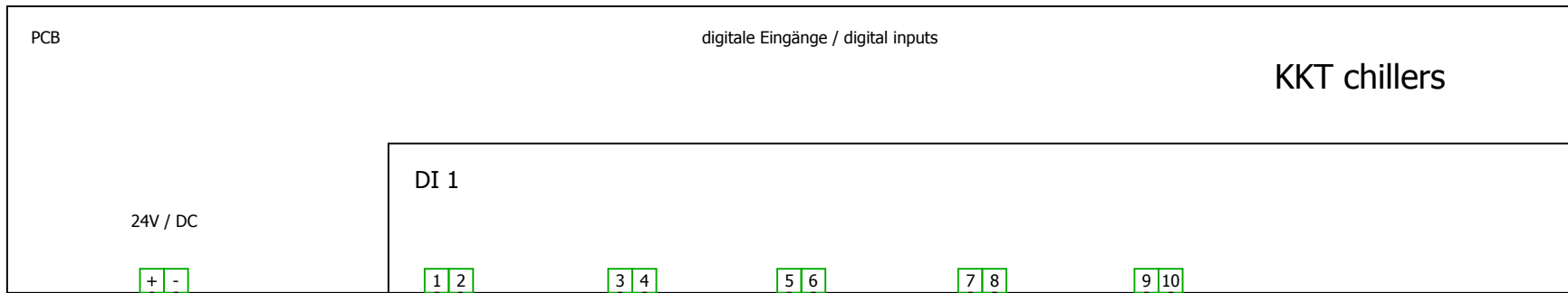
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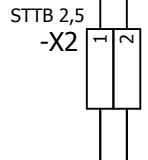
wiring diagram 909060-00244 ab 9060754
 cBoxX 60
 GES.CBX060J.24

Pot. Verteiler / power unit 24VDC

-8A1



/7.2 1L+
/7.2 1L-



1 = work
0 = stop

Fernsteuerung
remote control

drawn with ELCAD (R)

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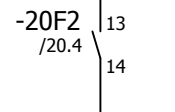
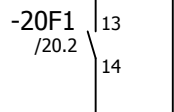
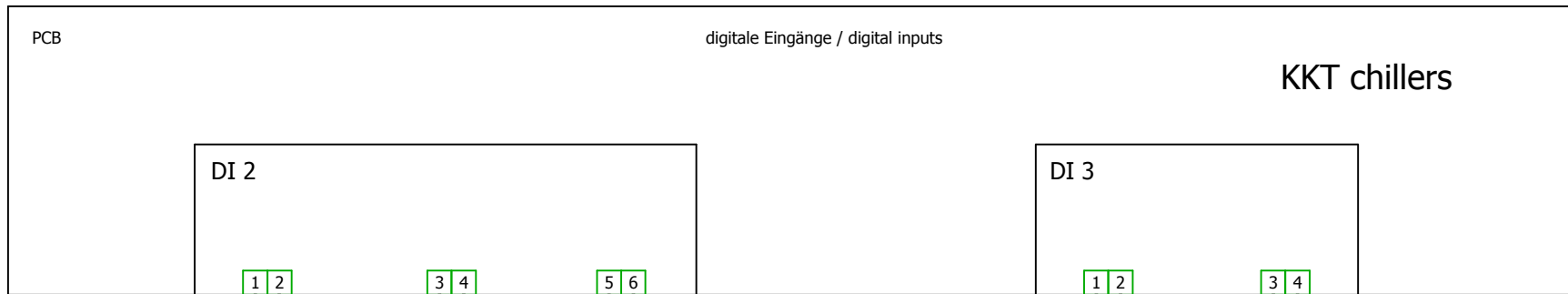


wiring diagram	909060-00244 ab 9060754
cBoxX 60	
GES.CBX060J.24	

Platine digitale Eingänge / PCB digital input	
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sheet	8
sh.	23

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MSS Pumpe 1
Verbraucher
Motor protection switch
consumers pump 1

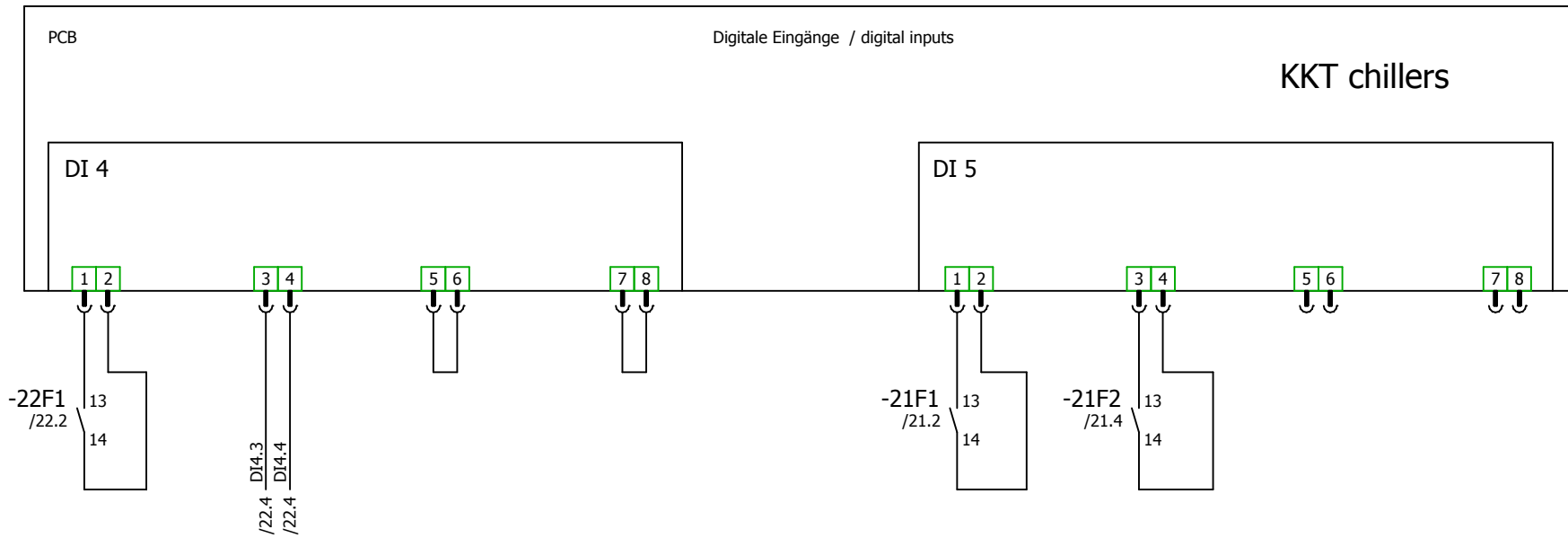
MSS Pumpe 2
Verbraucher
Motor protection switch
consumers pump 2

drawn with ELCAD (R)

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b		editor	R.Zeilmann	replacement by:						replacement for:	origin: KKT	sh. 23
a		check										
change	date	name	norm									

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MMS Lüfter 1
Circuit breaker
Fan 1

Störung Lüfter 1
Fault Fan 1

MSS
Kompressor 1
circuit breaker
compressor 1

MSS
Kompressor 2
circuit breaker
compressor 2

drawn with ELCAD (R)

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wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

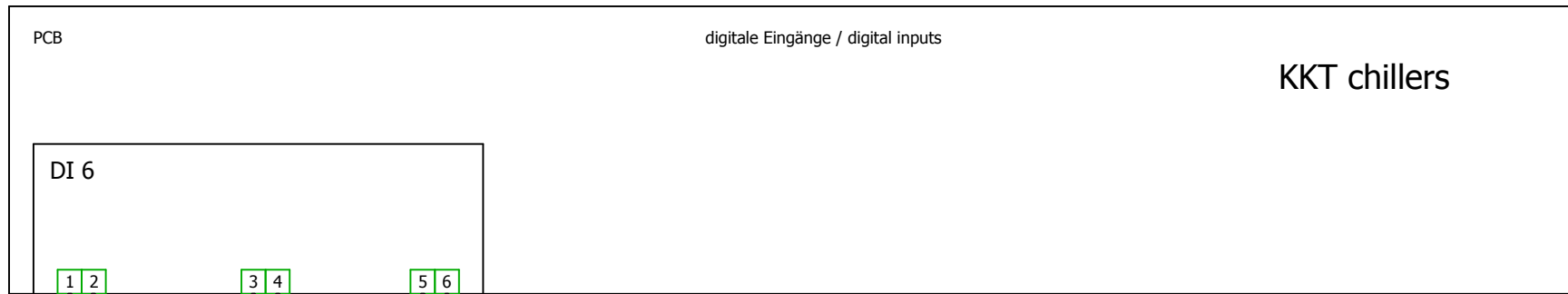
replacement by: replacement for:

origin: KKT

Platine digital Eingänge / PCB digital input

sheet 10
sh. 23

-8A1



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cBoxX 60	
GES.CBX060J.24	

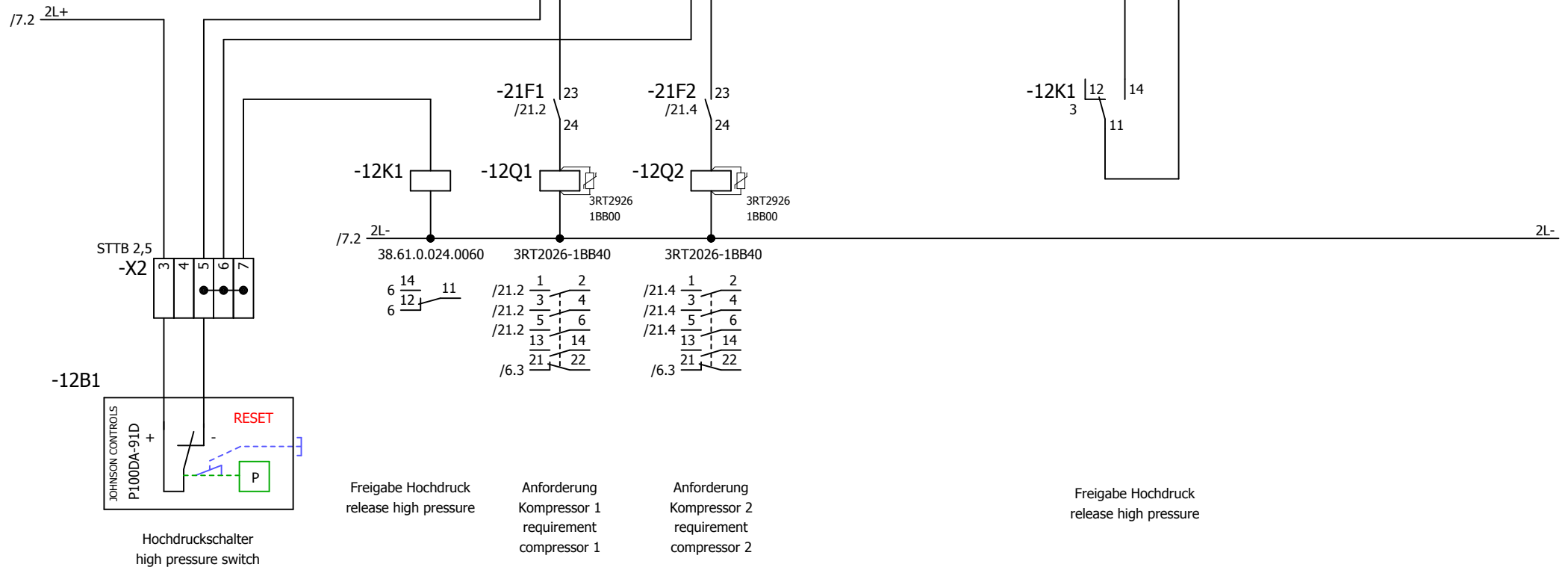
Platine digital Eingänge / PCB digital input	
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-8A1

PCB

ES 1

KKT chillers



drawn with ELCAD (R)

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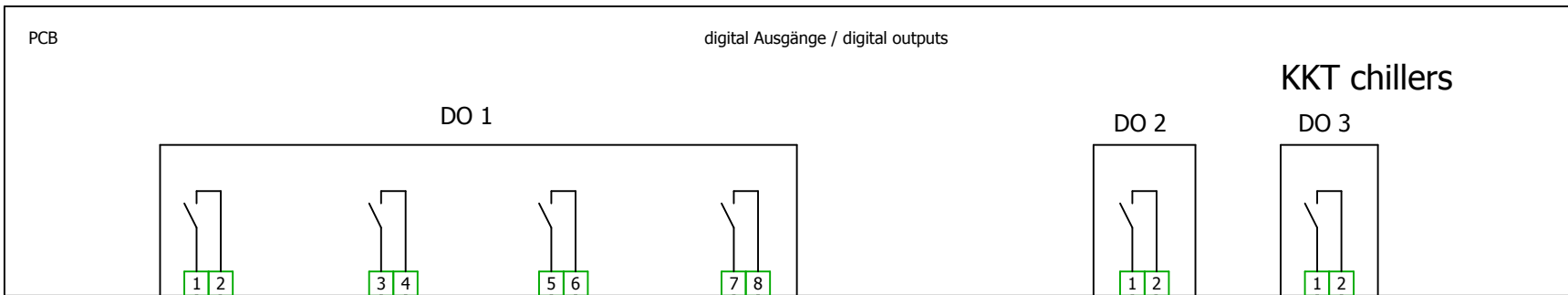


wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

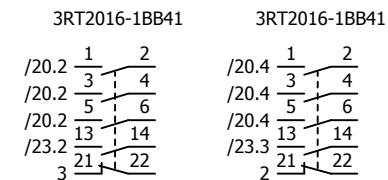
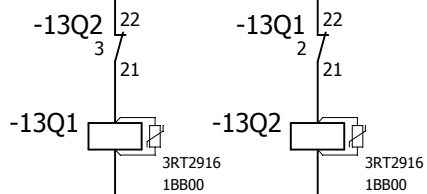
Platine digital Ausgänge / PCB digital output

sheet 12
sh. 23

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/7.2 3L+ 3L+



Freigabe
Pumpe 1 Verbraucher
release
pump 1 consumer

Freigabe
Pumpe 2 Verbraucher
release
pump 1 consumer

FU-Freigabe
Lüfter 1
release inverter
fan 1

drawn with ELCAD (R)

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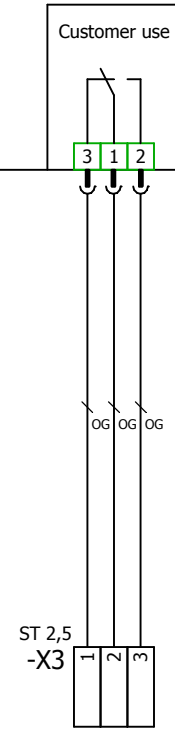
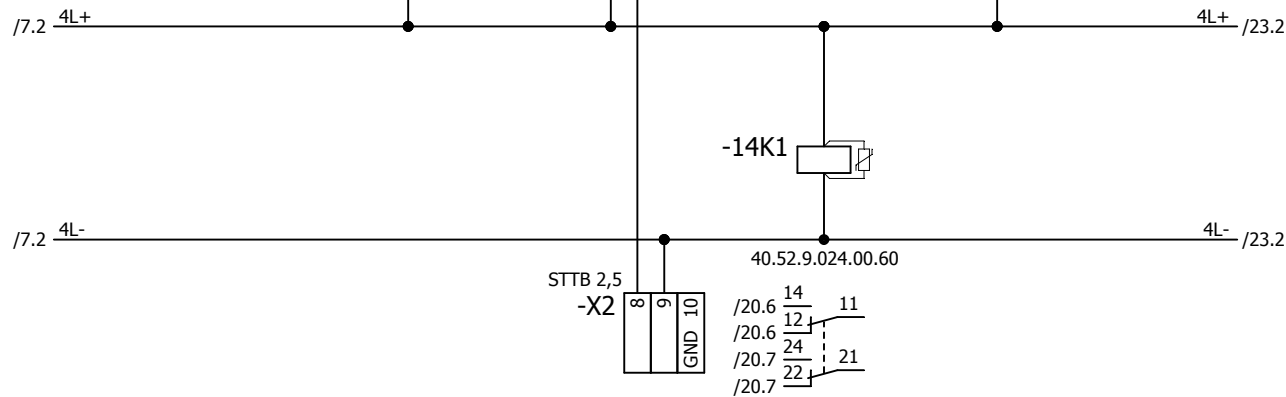
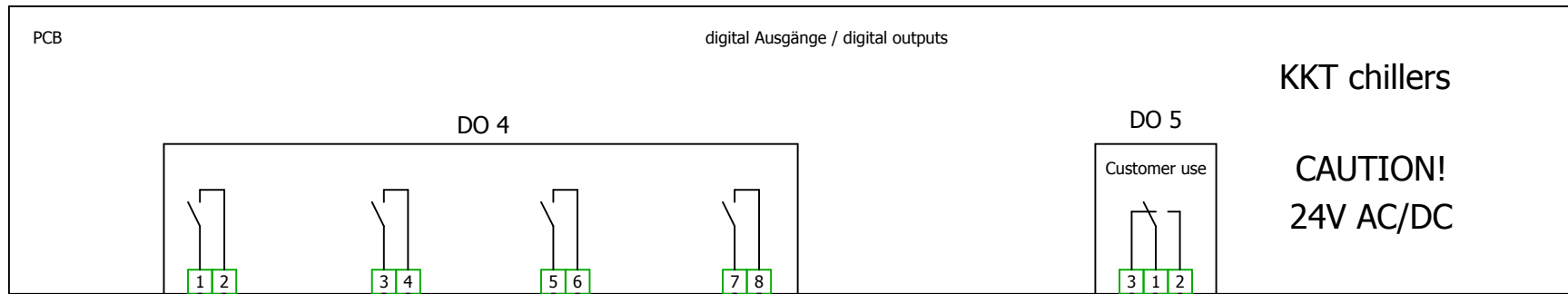
replacement for:



wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

Platine digital Ausgänge / PCB digital output

-8A1



1 = work
0 = stop

Heizung Sammler
heater accumulator

Sammelstörung
collective failure

drawn with ELCAD (R)

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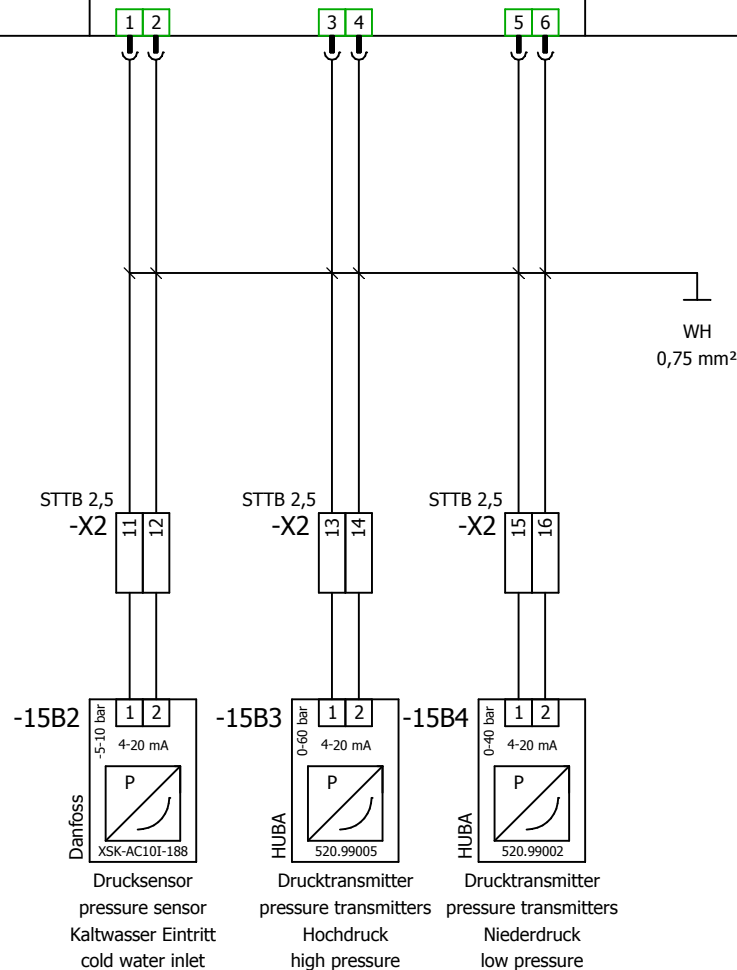
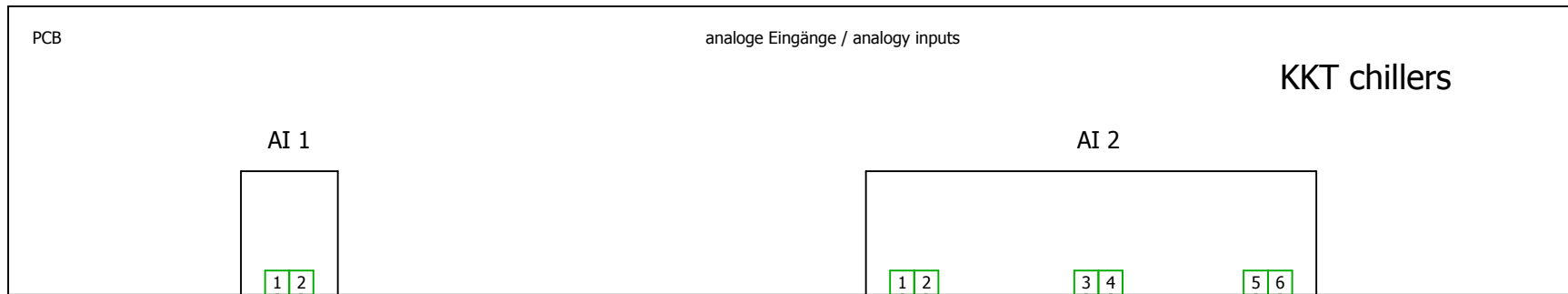


wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

Platine digital Ausgänge / PCB digital output

sheet	14
sh.	23

-8A1



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replacement by:	replacement for:

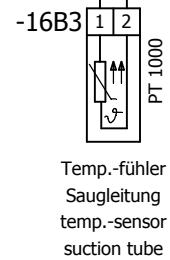
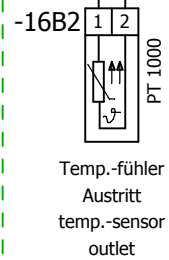
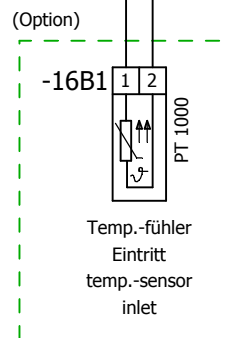
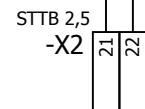
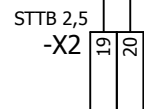
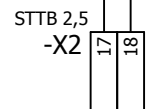
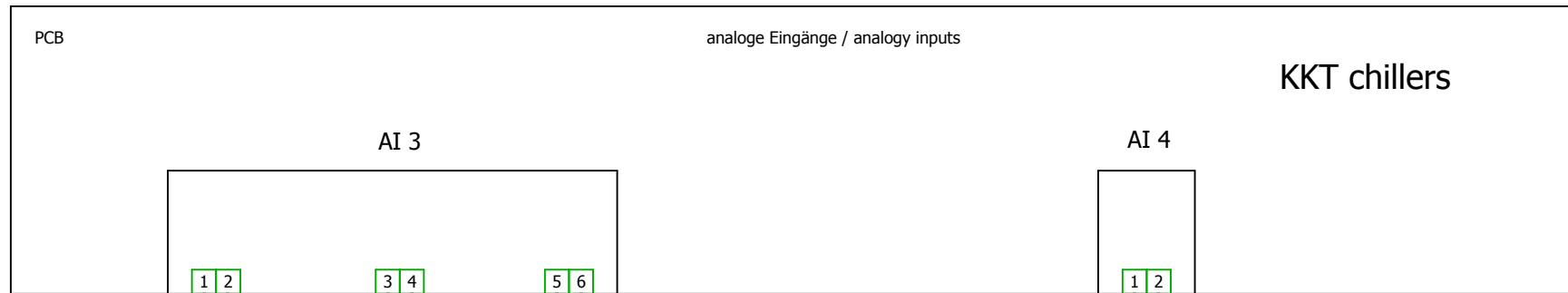


wiring diagram 909060-00244 ab 9060754
 cBoxX 60
 GES.CBX060J.24

Platine analog Eingänge / PCB analogy input		sheet 15
		sh. 23

origin: KKT

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WH
0,75 mm²

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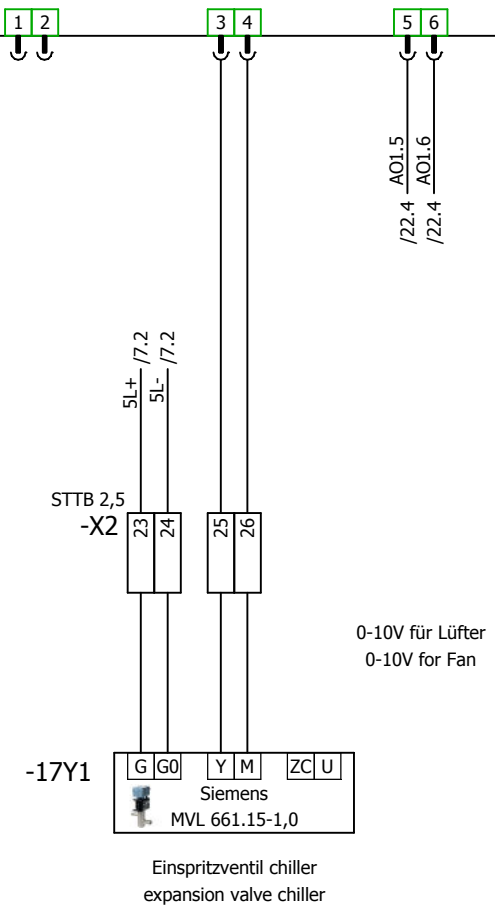
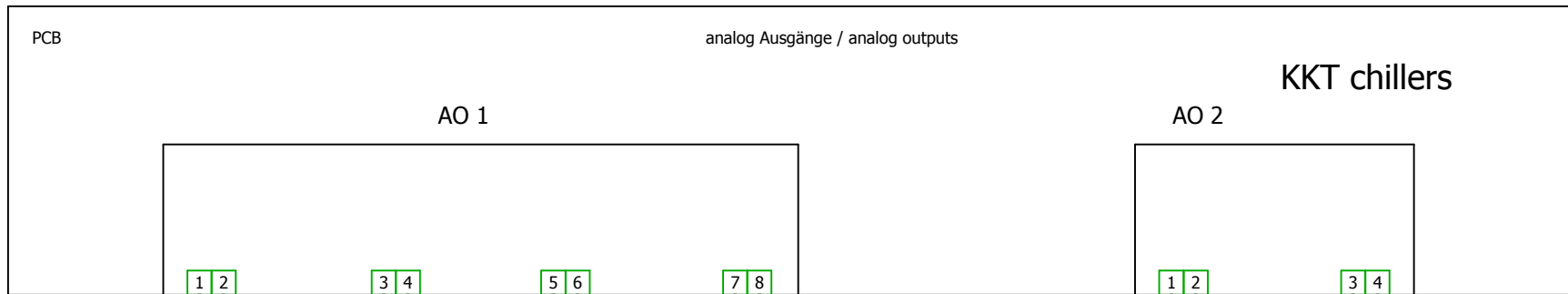
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wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24

replaced by:	replaced for:	origin:	KKT
Platine analog Eingänge / PCB analogy input			sheet 16 sh. 23

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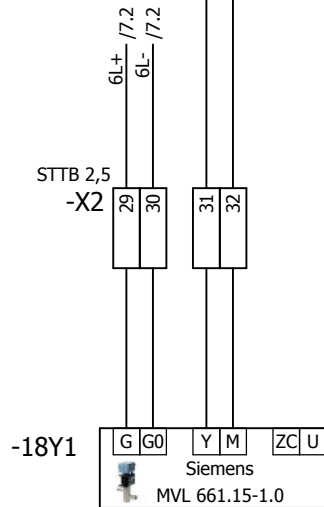
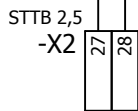
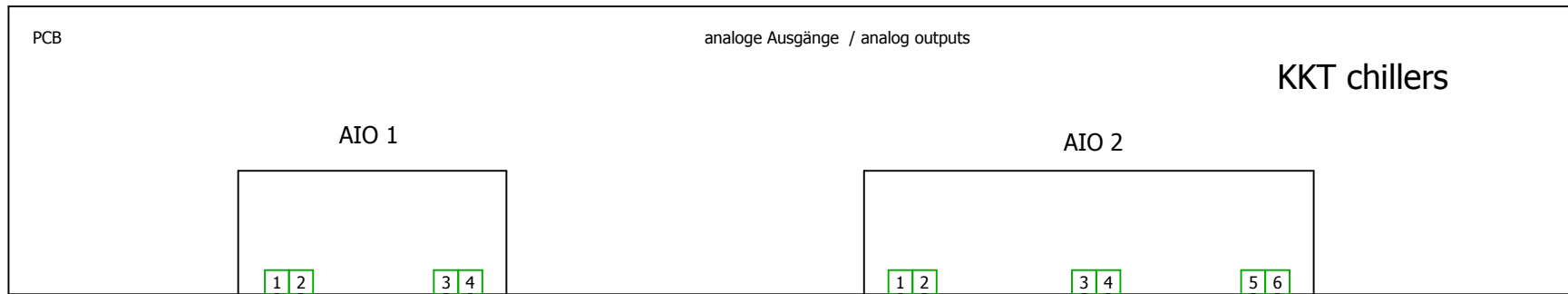
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wiring diagram 909060-00244 ab 9060754
 cBoxX 60
 GES.CBX060J.24

Platine analog Ausgänge / PCB analogy output		sheet 17
		sh. 23

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Einspritzventil chiller
expansion valve
heißgas bypass
hot gas bypass

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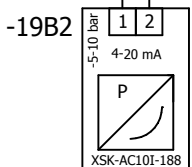
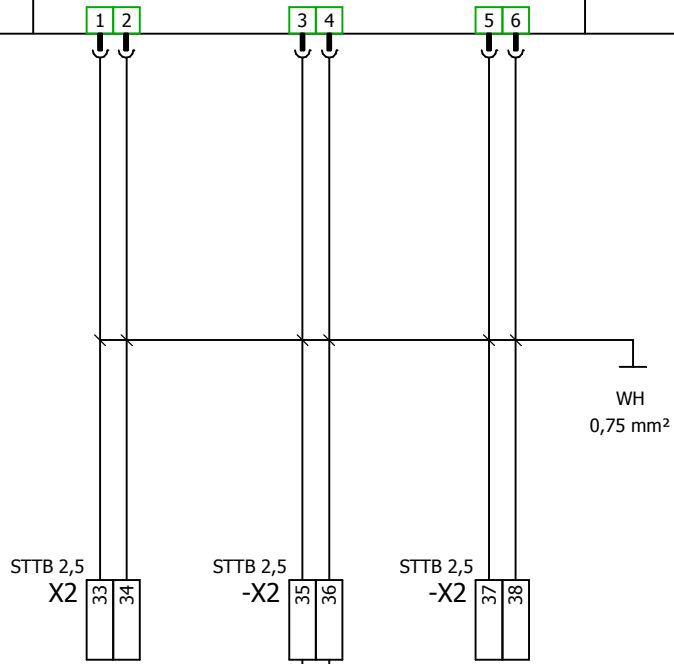
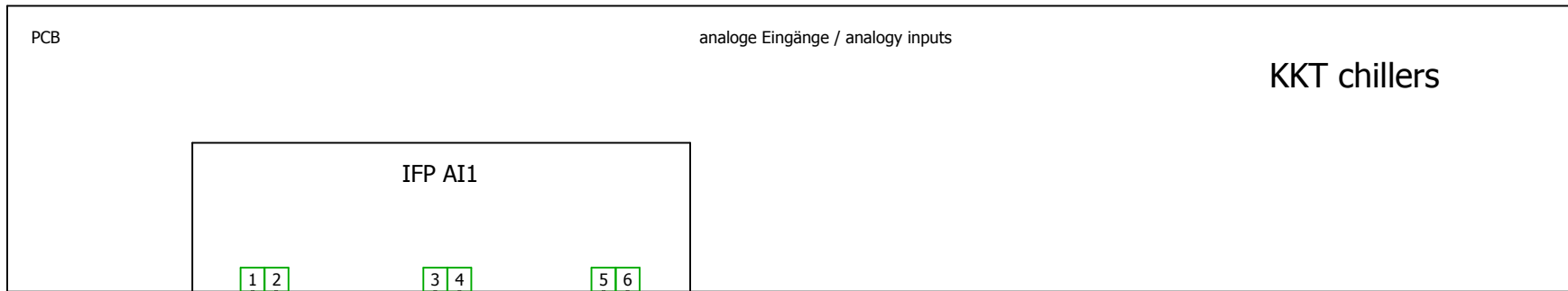


wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24
origin: KKT

Platine / PCB Reserve

sheet 18
sh. 23

-8A1



Drucksensor
 pressure sensor
 Druck Verbraucher
 Pumpe Austritt
 Pressure Consumer pump
 outlet

drawn with ELCAD (R)

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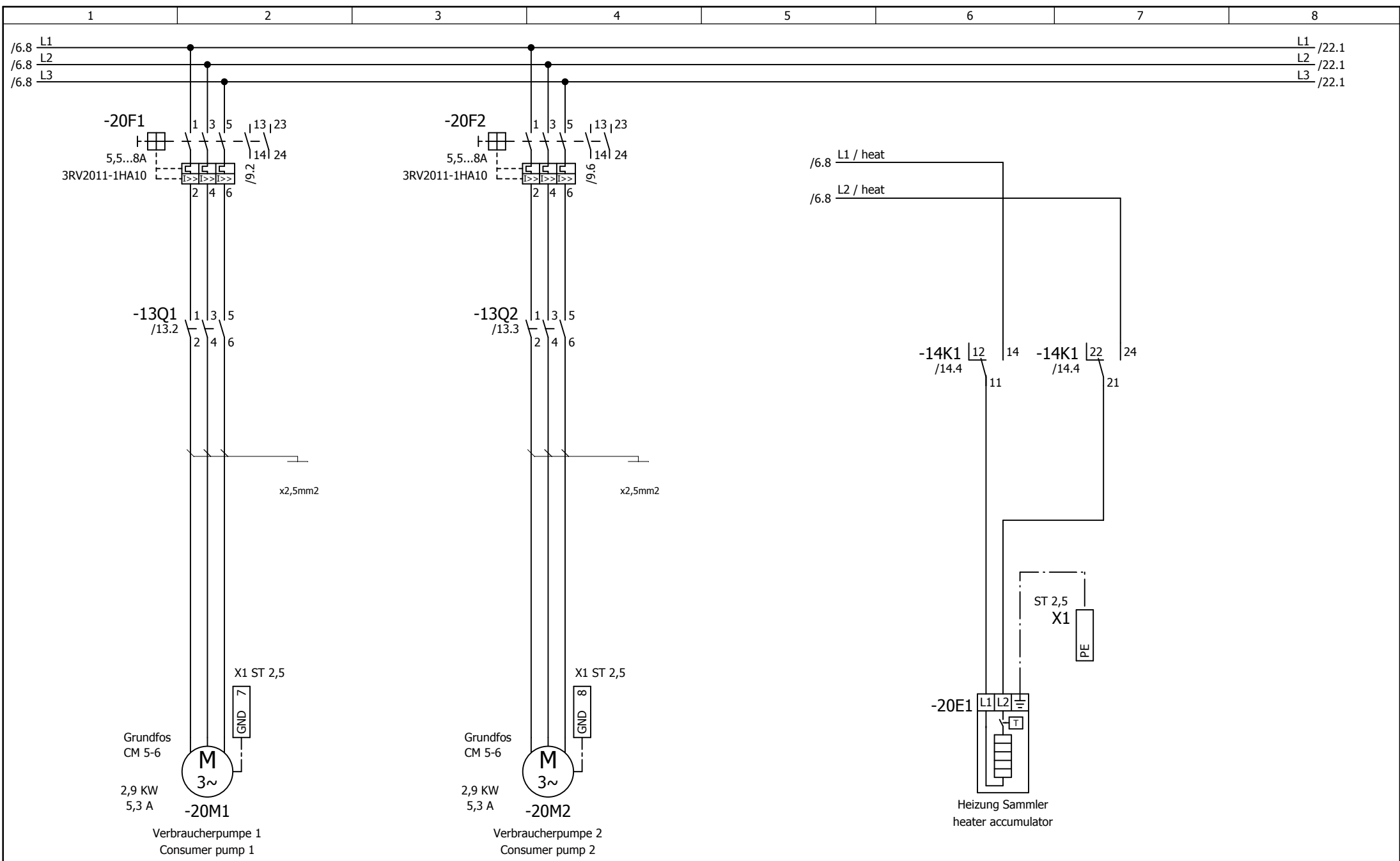
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wiring diagram 909060-00244 ab 9060754
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Platine analog Eingänge / PCB analogy input



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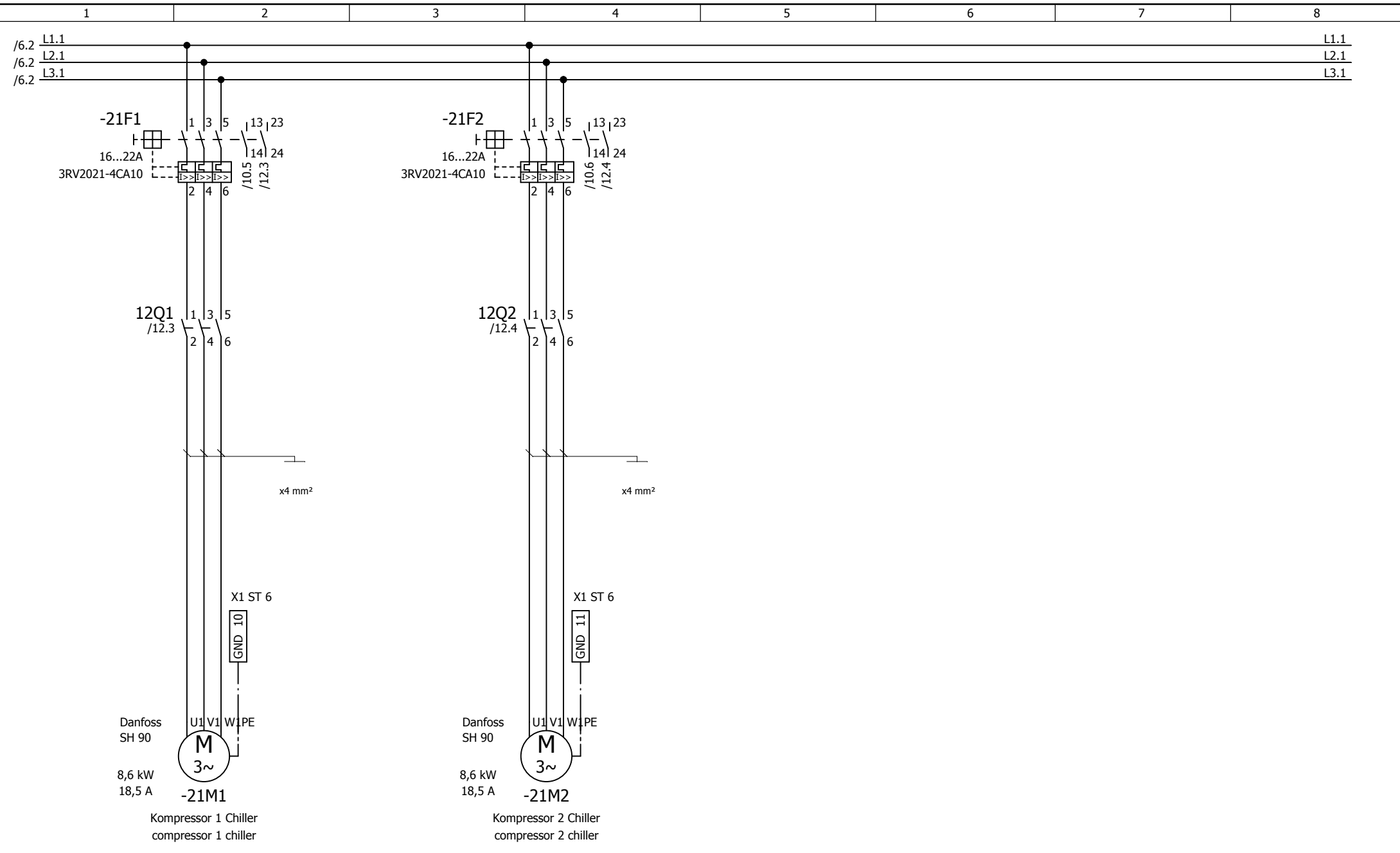
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replacement by:	replacement for:



wiring diagram 909060-00244 ab 9060754
 cBoxX 60
 GES.CBX060J.24

Pumpe / pump		sheet 20
		sh. 23



drawn with ELCAD (R)

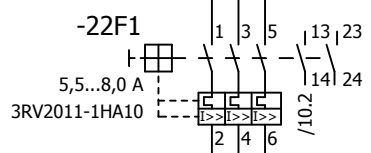
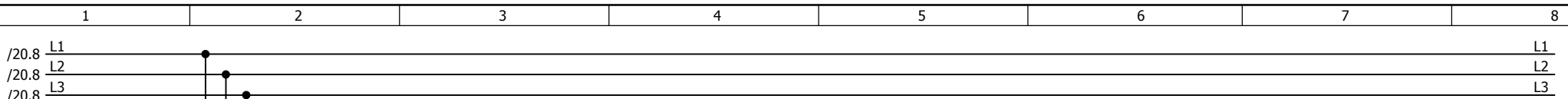
Alle Leitungen ohne Querschnittsangabe sind H05V-K 0,75 mm²
 All lines without cross-sectional specification are H05V-K 0,75 mm²

c		date	30.08.2016
b		editor	R.Zeilmann
a		check	
change	date	name	norm

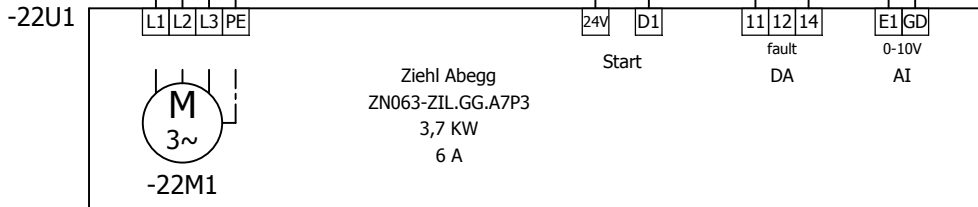
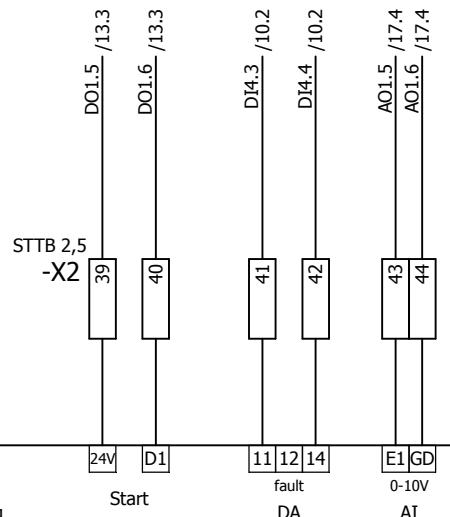
KKT chillers - a brand of
 ait - deutschland GmbH



wiring diagram 909060-00244 ab 9060754
 cBoxX 60
 GES.CBX060J.24



x2,5mm2



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

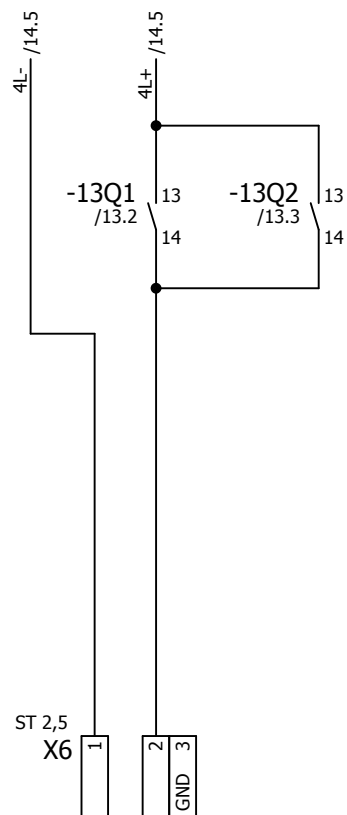
c			date	30.08.2016
b			editor	R.Zeilmann
a			check	
change	date	name	norm	

KKT chillers - a brand of
ait - deutschland GmbH



wiring diagram 909060-00244 ab 9060754
cBoxX 60
GES.CBX060J.24


replacement by:		replacement for:		origin:	KKT
Kondensatorlüfter / Condenser fan 1					sheet 22 sh. 23



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	30.08.2016	KKT chillers - a brand of ait - deutschland GmbH		wiring diagram	909060-00244 ab 9060754	
b		editor	R.Zeilmann						
a		check							
change	date	name	norm	replacement by:	replacement for:	origin:	KKT		

cBoxX 60
 GES.CBX060J.24

Motorklappe / motor flap

sheet 23
 sh. 23