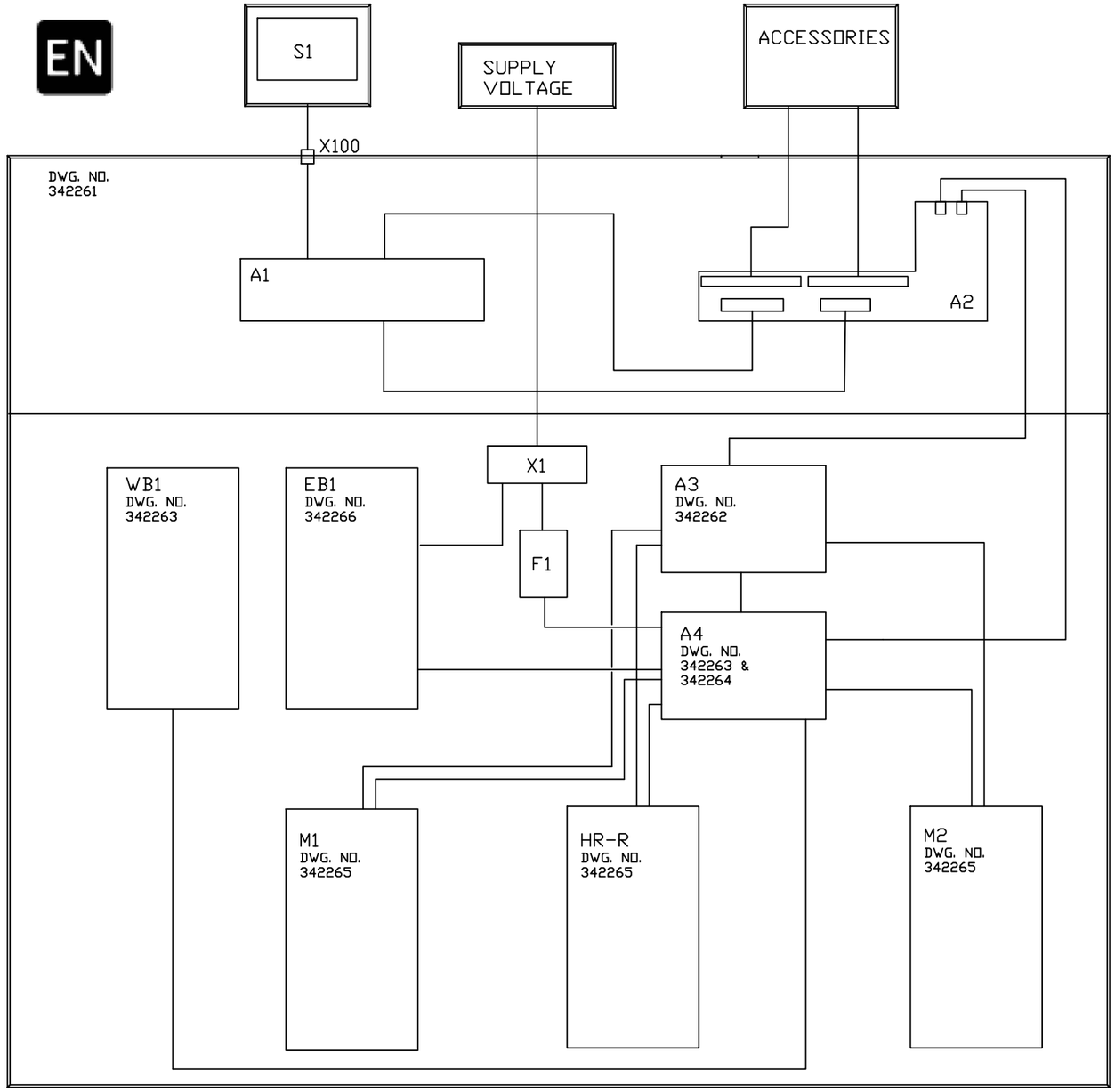
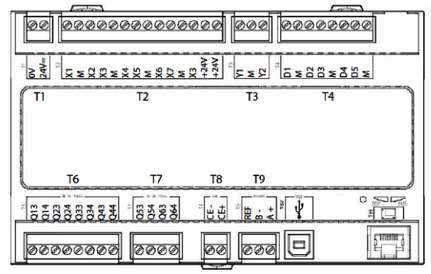
EN

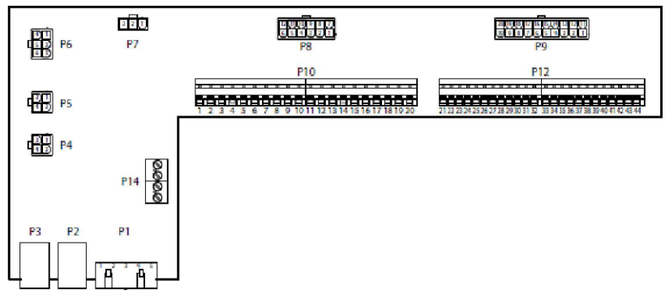


AIR HANDLING UNIT

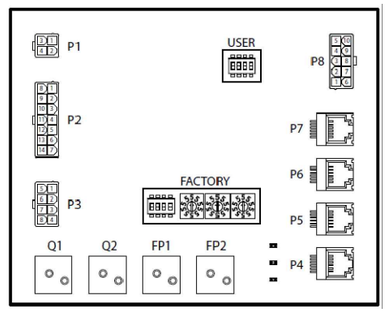
A1



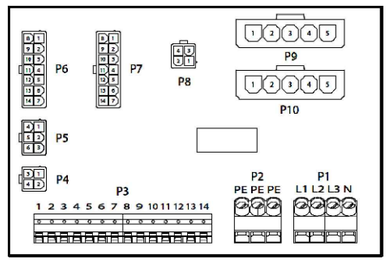
A2



A3



A4

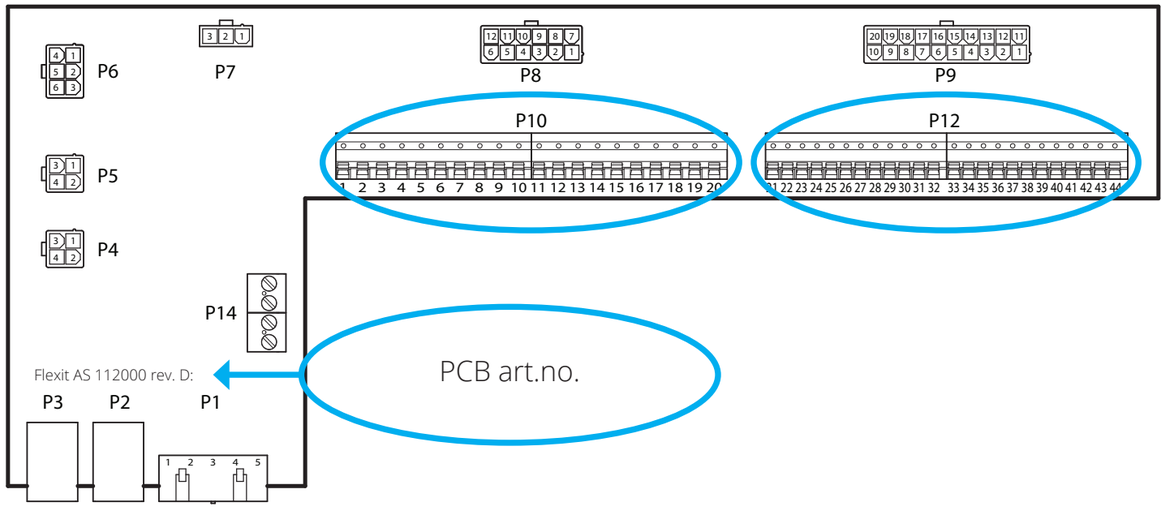


Symb.	Changes	Date/Sign.
1	Monochrome PDF	160916/MAJ

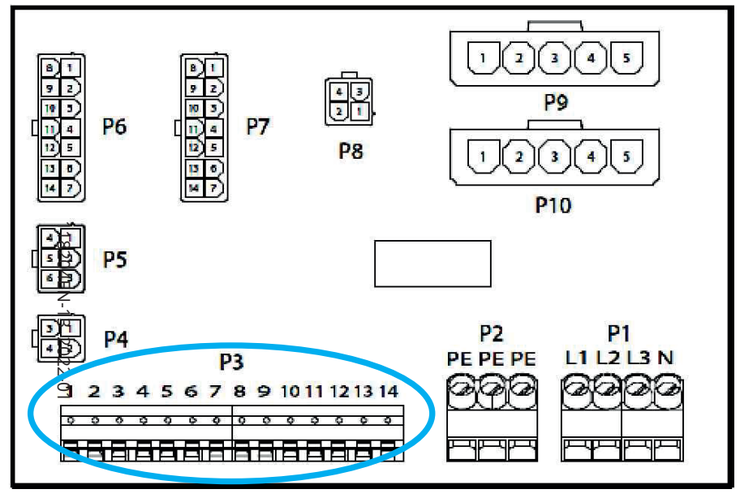
No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date 2013-02-19	Drawn KarBen	Projection	Scale	FLEXIT	
Checked	Appr.				
CONNECTION DIAGRAM L14, L20, L26 & L32 ART.NO. 113063				Replaces:	Replaced by:
				342270	

Lay-out Mountain

A2



A4



External accessories

Terminal block P10 has the following signals:

Block	Funktion	Description
1	L 230V	Power supply external accessories
2	N	Power supply external accessories
3	L 230V	Power supply outdoor air damper
4	L1 230V	Control signal outdoor air damper ON/OFF
5	N	Power supply outdoor air damper
6	L 230V	Power supply exhaust air damper
7	L1 230V	Control signal exhaust air damper ON/OFF
8	N	Power supply exhaust air damper
9	L 230V	Power supply fire damper*
10	L1 230V	Control signal fire damper ON/OFF*
11	N	Power supply fire damper*
12	Alarm IN	Pot.free contact alarm ON/OFF
13	Alarm OUT	Pot.free contact alarm ON/OFF
14	Cooling IN	Pot.free contact cooling (DX or Pump) ON/OFF
15	Cooling OUT	Pot.free contact cooling (DX or Pump) ON/OFF
16	L 230V	Power supply external accessories
17	Heating IN	Pot.free contact ext. heating (Elec./Water) ON/OFF
18	Heating OUT	Pot.free contact ext. heating (Elec./Water) ON/OFF
19	N	Power supply external accessories
20	Spare	Not used

*From PCB art.no. 112002:

9	C	Pot.free contakt Fire damperON/OFF
10	NO	Pot.free contakt Fire damperON/OFF
11	N/A	No connection

Terminal block P12 has the following signals:

Block	Funktion	Description
21	AO 0-10V	Control signal cooling (Valve or DX)
22	G0	Signal ground cooling
23	DI S1	Signal external speed control step 1
24	G0	Signal ground speed control step 1
25	DI S2	Signal external speed control step 2
26	G0	Signal ground speed control step 2
27	DI F/S	Signal Fire/Smoke input
28	G0	Signal ground Fire/Smoke input
29	AI 0-10V	Signal demand control (ex. CO_2)
30	G0	Signal ground demand control
31	AO 0-10V	Control signal external heateing (Elec./Water)
32	24VAC	Power supply external accessories
33	G0	Signal ground external heateing
34	DI FD O	Signal fire damper OPEN
35	DI FD L	Signal fire damper CLOSED
36	G0	Signal ground fire damper
37	AO 0-10V	Control signal AUX damper
38	G0	Signal ground AUX damper
39	DI/AI TEMP	Signal fire/frost sensor external heating
40	G0	Signal ground fire/frost sensor ext. heating
41	Bus -	KNX-bus SP65 Room sensor
42	Bus +	KNX-bus SP65 Room sensor
43	AI 0-10V	Control signal supply fan external (ex. VAV)
44	AI 0-10V	Control signal extract fan external (ex. VAV)

Circulation pump and valve motor

Terminal block P3 has the following signals:

Block	Funktion	Description
1	G0	Signal ground external accessories
2	24VAC	Power supply external accessories
3	G0	Signal ground valve motor internal water battery
4	AO 0-10V	Control signal valve motor internal water battery
5	G0	Signal ground fire/frost
6	DI FT	Signal fire termostat
7	AI FT	Signal frost sensor
8	Spare	Not used
9	N	Power supply external accessories
10	Heating OUT	Pot.fri contact circ.pump intern. water battery ON/OFF
11	Heating IN	Pot.fri contact circ.pump intern. water battery ON/OFF
12	L 230V	Power supply external accessories
13	N	Power supply external accessories
14	L 230V	Power supply external accessories

A1

A2

A3

A4

T1

T2

T3

T4

T6

T7

T8

T9

0V (24V) N 24VAC L

T1 24V T1 0V T1 -112155 -112157

T2 X1 T2 M T2 X2 T2 M T2 X3 T2 M T2 X6 T2 M T2 -112157

X5 T2 -112157 X4 T2 -112157 X8 T2 -112157

M T2 X7 T2 -112157 M T2 X7 T2 -112157

D1 T4 Y2 T3 -112157 M T3 Y1 T3 -112157 M T4 D2 T4 -112157 D3 T4 -112157 M T4 D4 T4 -112157 D5 T4 -112157 M T4

Q13 T6 Q14 T6 -112156 Q23 T6 Q24 T6 -112156 Q33 T6 Q34 T6 -112156 Q43 T6 Q44 T6 -112156 Q53 T7 Q54 T7 -112156 Q63 T7 Q64 T7 -112156

A+ T9 -112158 B- T9 -112158 REF T9 -112158 CE+ T8 CE- T8 -112157

-112155 -112157 -112157 -112157 -112157 -112157 -112157 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112158 -112158 -112158 -112157

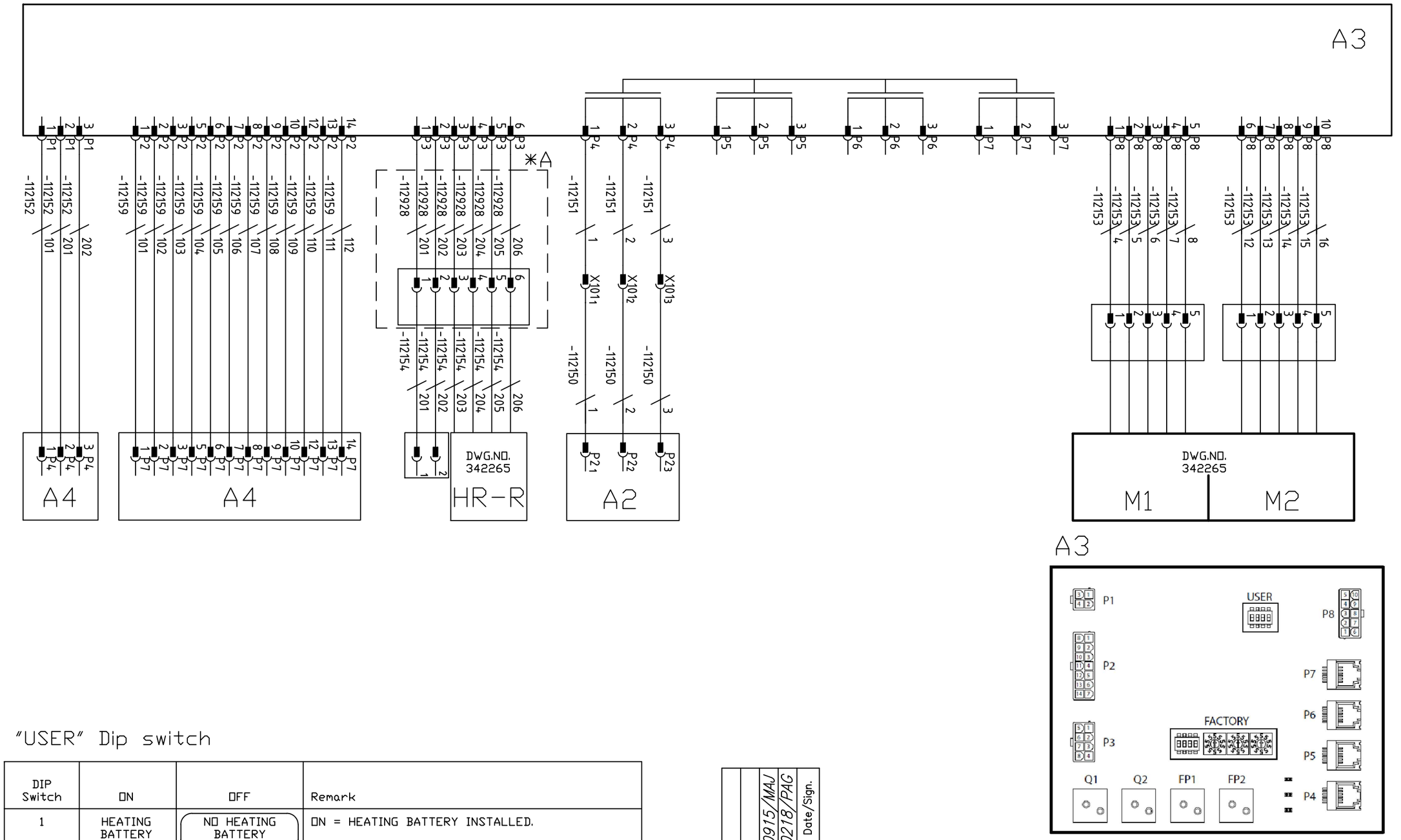
204 203 202 201 107 106 105 114 103 108 104 115 109 110 111 112 113 209 211 212 210 207 208 202 201 203 204 205 206 301 302 303 116 117

6 P6 4 P6 3 P6 1 P6 7 P9 6 P9 5 P9 14 P9 3 P9 8 P9 4 P9 15 P9 2 P9 11 P9 12 P9 13 P9 9 P8 11 P8 12 P8 10 P8 7 P8 8 P8 3 P8 2 P8 1 P8 4 P8 5 P8 6 P8 1 P7 2 P7 3 P7 16 P9 17 P9

1 P1 4 P1 2 P1 5 P1 3 P1 1 P4 2 P4 1 P5 3 P5 2 P5 18 P9 19 P9 1 P9 2 P9 1 P3 2 P3 3 P3

P12 P10 P14

-112155 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112157 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156 -112156



"USER" Dip switch

DIP Switch	ON	OFF	Remark
1	HEATING BATTERY	NO HEATING BATTERY	ON = HEATING BATTERY INSTALLED. OFF = NO HEATING BATTERY INSTALLED.
2	ELECTRICAL	WATER	TYPE OF HEATING BATTERY.
3	YES	NO	M1 MOTORVERN LASKET.
4	YES	NO	M2 MOTORVERN LASKET.

( ) = Factory setting

*A = Only valid for units in L-series

Symb.	Changes	Date/Sign.
2	Monochrome PDF	160915/MAJ
1	DRAWING UPDATED	130218/PAG

No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date 2012-07-03		Drawn KarBen	Projection	Scale	FLEXIT
Checked		Appr.			

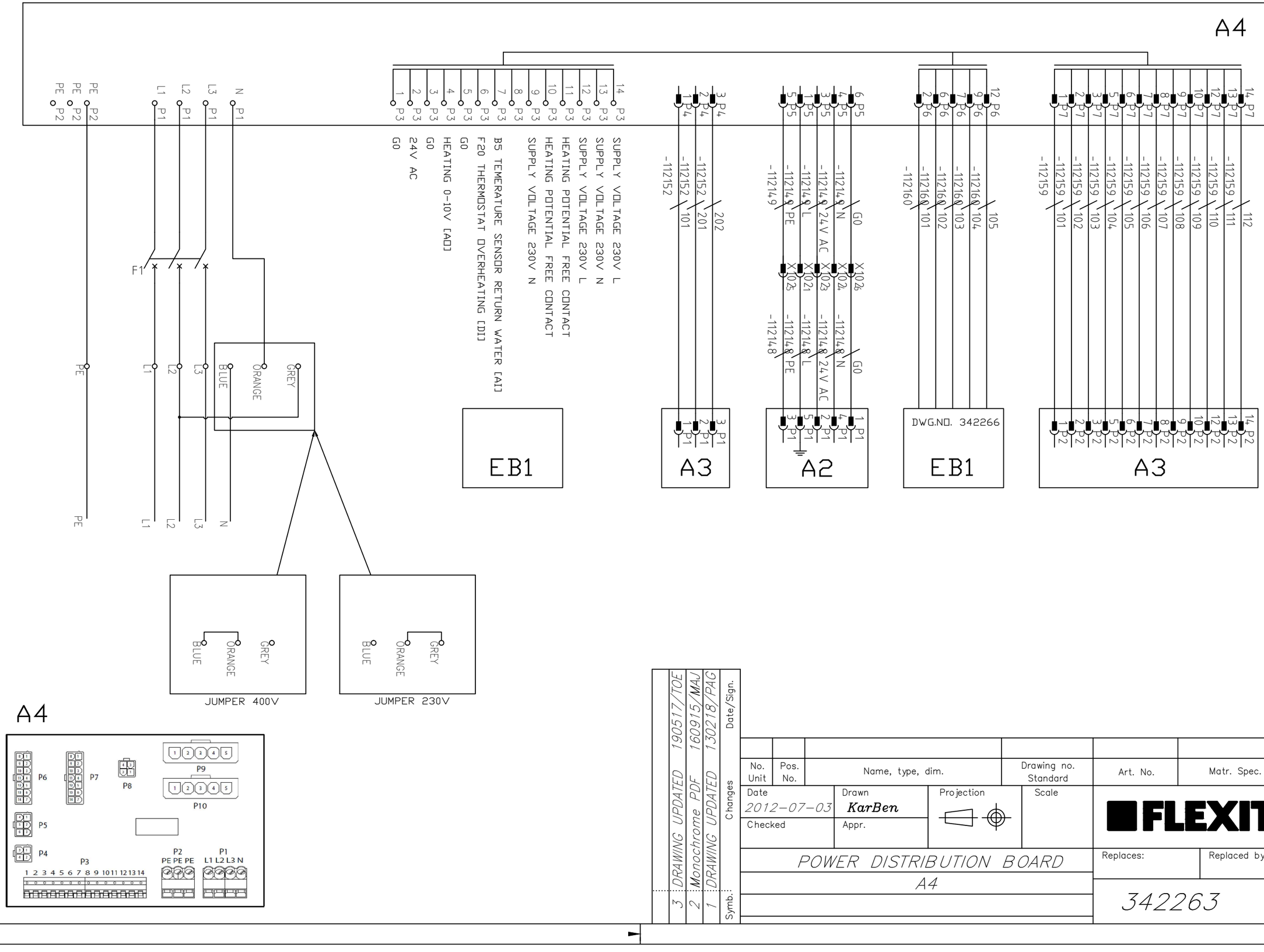
MODBUS I/O-EXTENDER

A3

Replaces: | Replaced by:

342262

Lay-out Mountain



Symb.	Changes	Date/Sign.
3	DRAWING UPDATED	190517/TOE
2	Monochrome PDF	160915/MAU
1	DRAWING UPDATED	130218/PAG

No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.

Date	Drawn	Projection	Scale
2012-07-03	KarBen		
Checked	Appr.		

FLEXIT

POWER DISTRIBUTION BOARD

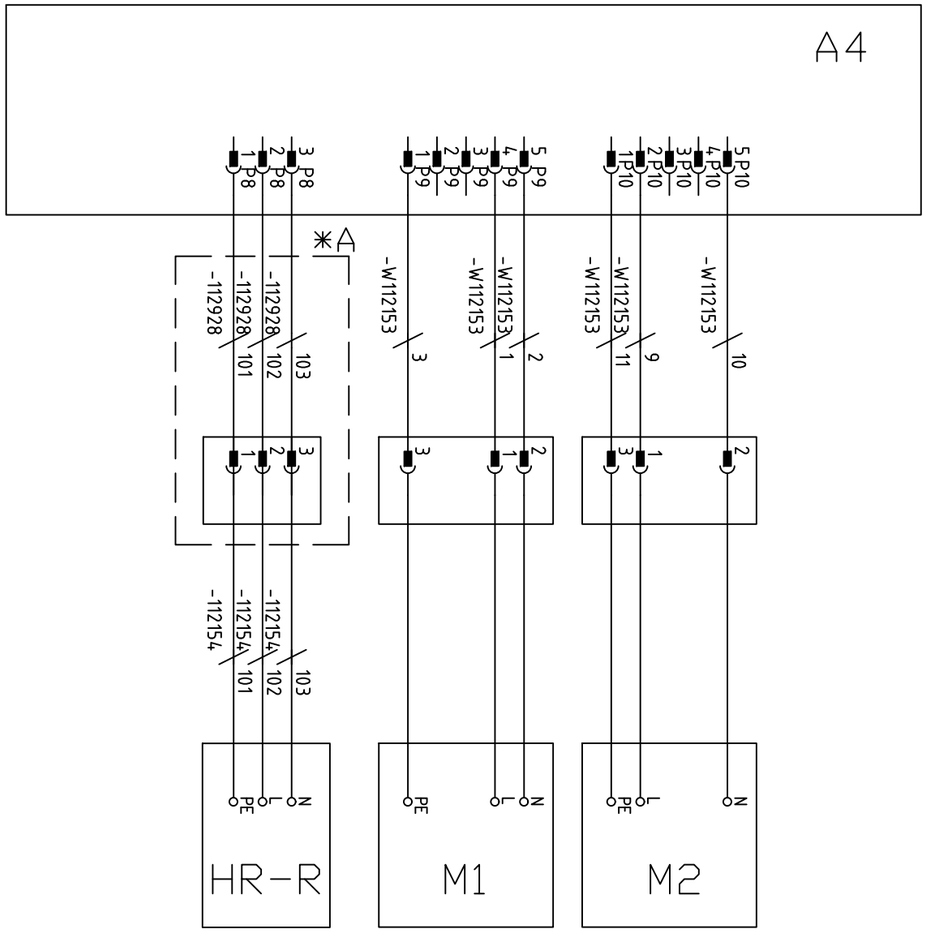
A4

Replaces:	Replaced by:
	342263

Lay-out Mountain

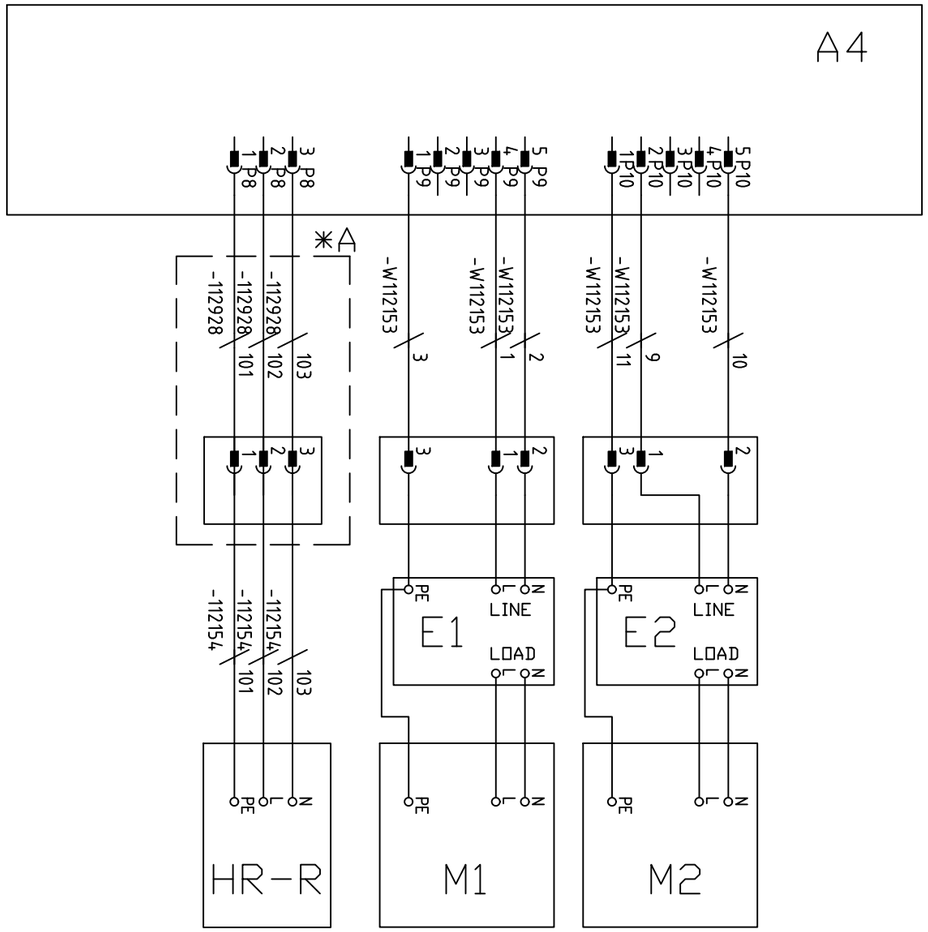
S10, L14, S15, L20 & S20

A4

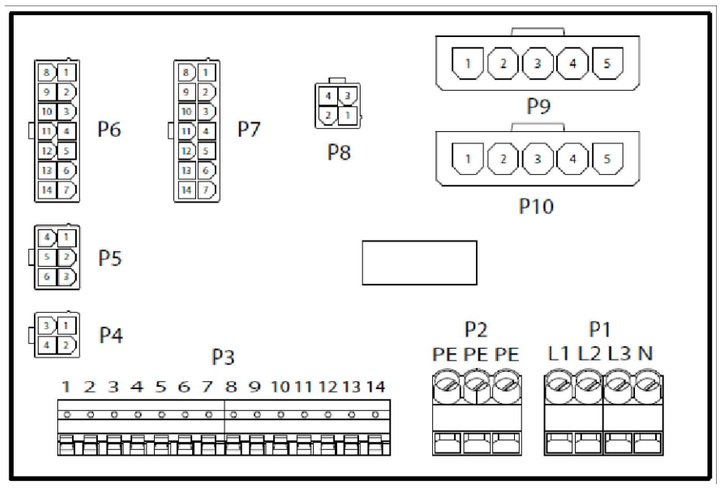


L26, L32 & S32

A4



A4



*A = Only valid for units in L-series

Symb.	Changes	Date/Sign.
4	Monochrome PDF	160915/MAJ
3	DRAWING UPDATED	131129/TOE
2	DRAWING UPDATED	130508/PAG
1	DRAWING UPDATED	130218/PAG

No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.

Date	Drawn	Projection	Scale
2012-07-03	KarBen		
Checked	Appr.		

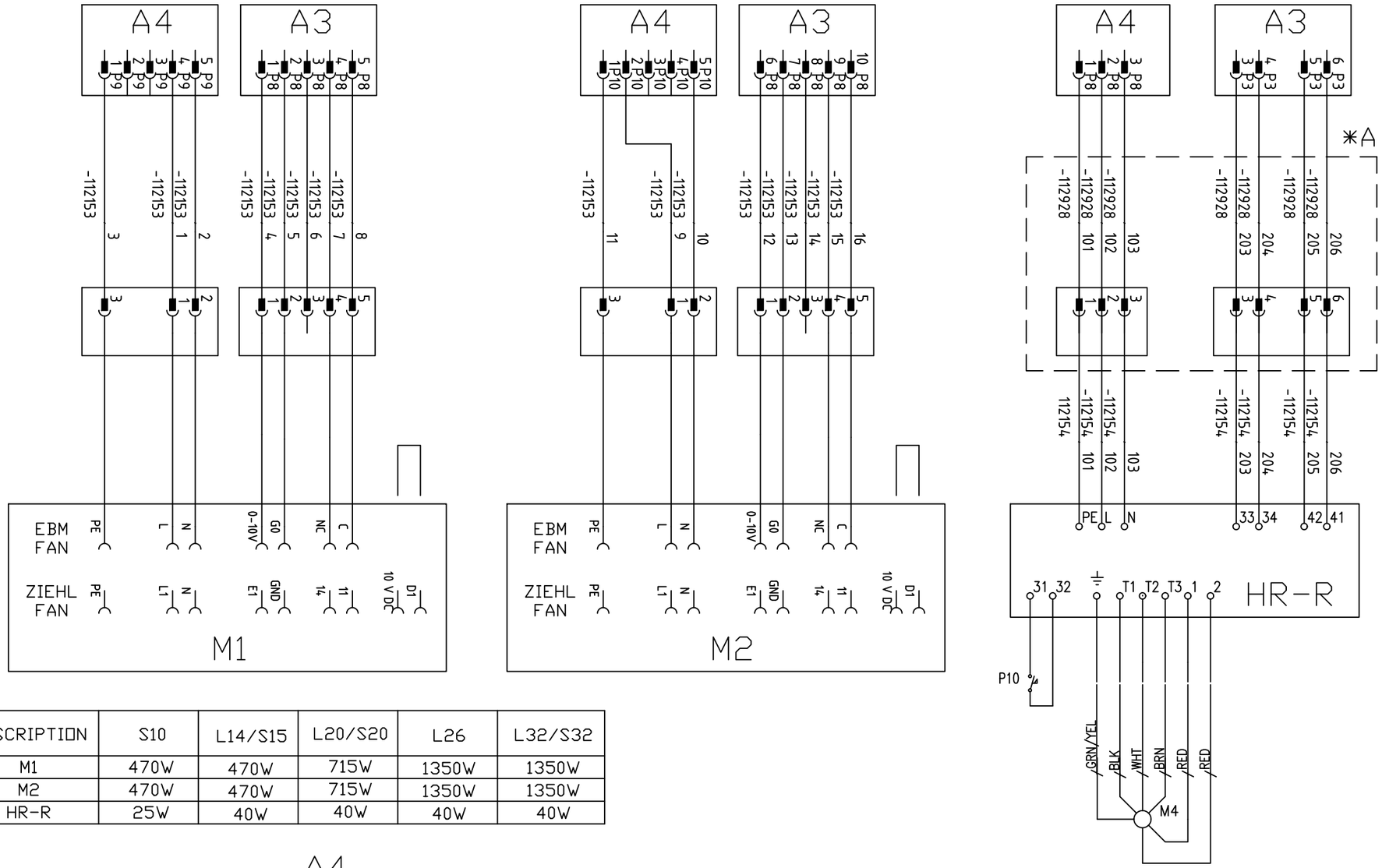
FLEXIT®

POWER DISTRIBUTION BOARD

A4

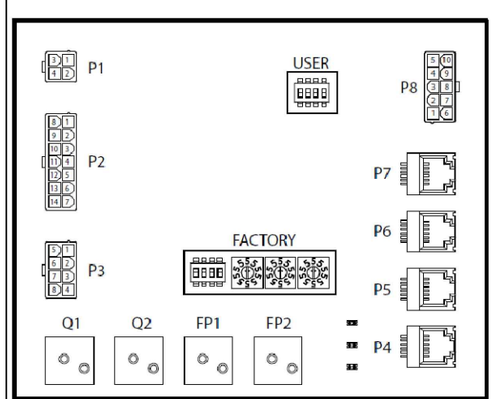
Replaces:	Replaced by:
	342264

Lay-out Mountain

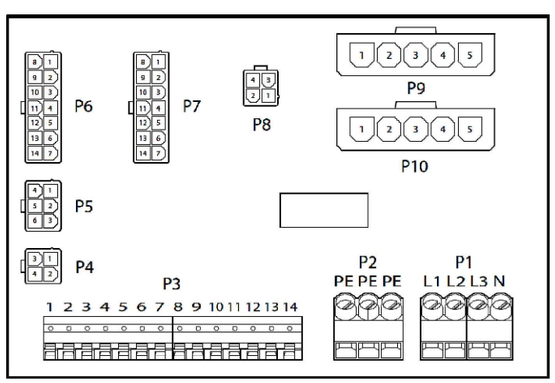


DESCRIPTION	S10	L14/S15	L20/S20	L26	L32/S32
M1	470W	470W	715W	1350W	1350W
M2	470W	470W	715W	1350W	1350W
HR-R	25W	40W	40W	40W	40W

A3



A4



*A = Only valid for units in L-series

Symb.	Changes	Date/Sign.
8	Monochrome PDF	160915/MAJ
7	DRAWING UPDATED	140321/TOE
6	DRAWING UPDATED	140313/TOE
5	DRAWING UPDATED	131128/TOE
4	DRAWING UPDATED	131017/LA
3	DRAWING UPDATED	130508/PAG

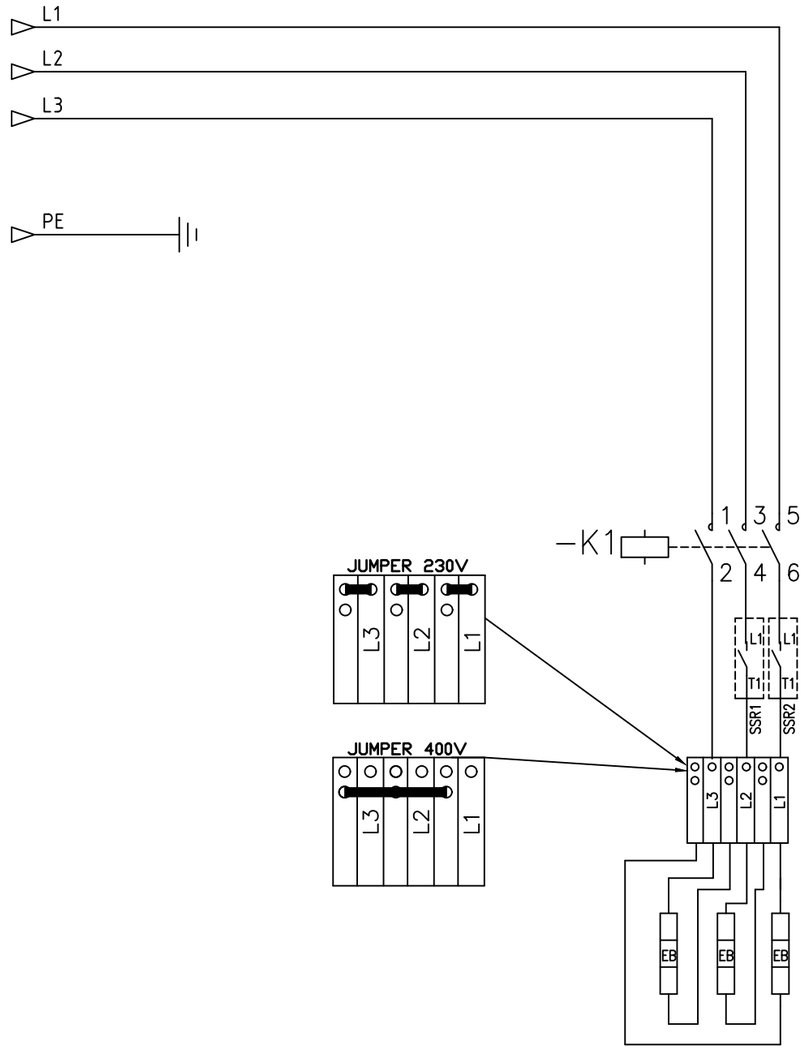
No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.
Date 2012-07-03		Drawn KarBen	Projection	Scale	FLEXIT®
Checked		Appr.			

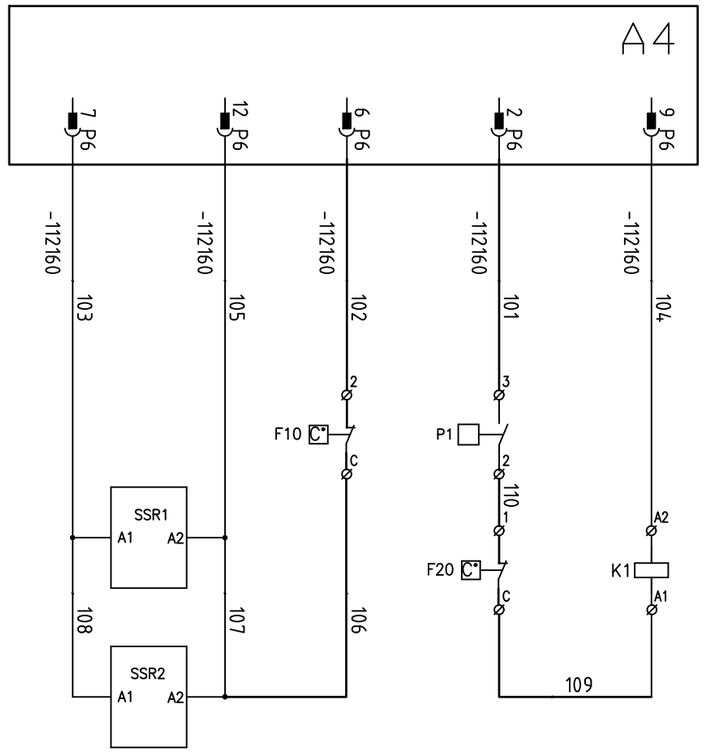
FANS + ROTOR
M1, M2 AND HR-R

Replaces: | Replaced by:

342265

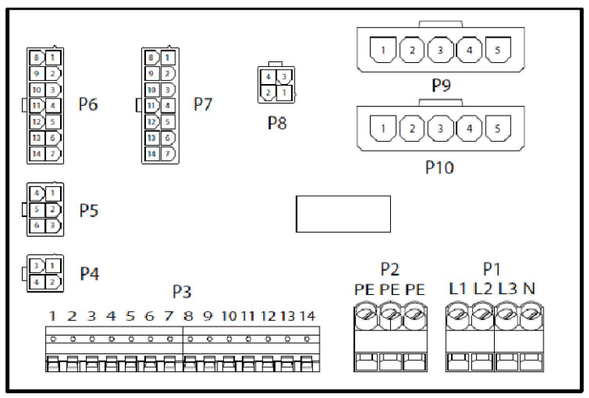
Lay-out Moun'tain





DESCRIPTION	S10	L14/S15	L20/S20	L26	L32/S32
EB	833W	1500W	1850W	2500W	3000W

A4



Symb.	Changes	Date/Sign.
5	Monochrome PDF	160915/MAJ
4	DRAWING UPDATED	131128/TOE
3	DRAWING UPDATED	130508/PAG
2	DRAWING UPDATED	130218/PAG

No. Unit	Pos. No.	Name, type, dim.	Drawing no. Standard	Art. No.	Matr. Spec.

Date	Drawn	Projection	Scale
2012-07-03	KarBen		
Checked	Appr.		

FLEXIT®

ELECTRIC HEATER

EB1

Replaces:	Replaced by:
342266	

Lay-out Mountain

DESCRIPTION	NO	EN	SV	DA	FI
A1	*Regulator*	*Regulator*	*Regulator*	*Styresystem*	*Ohjausjärjestelmä*
A2	*Koblingskort*	*Connection board*	*Anslutningskort*	*Klemmekort*	*Riviliitinkortti*
A3	*Modbusextender*	*Modbus extender*	*Modbusextender*	*Modbusextender*	*Modbus-laajennin*
A4	*Strømforsyningskort*	*Power supply board*	*Strömförsörjningskort*	*Strømforsyningskort*	*Virransyöttökortti*
A5	*Styresignaler til rotor*	*Rotor controller*	*Rotorstyrning*	*Styresignaler til rotor*	*Roottorin ja lämpötila*
B1	*Temperaturføler, tilluft*	*Temperature sensor, supply air*	*Temperaturgivare, tilluft*	*Temperaturføler, indsugningsluft*	*Tuloilma-anturi*
B3	*Temperaturføler, avtrekk*	*Temperature sensor, extract air*	*Temperaturgivare, frånluft*	*Temperaturføler, udsugning*	*Lämpötila-anturi, poistoilma*
B4	*Temperaturføler, uteluft*	*Temperature sensor, outdoor air*	*Temperaturgivare, uteluft*	*Temperaturføler, udeluft*	*Lämpötila-anturi, ulkoilma*
B5	*Returvannsføler vannbatteri*	*Returnwater sensor, water battery*	*Returvattengivare, vattenbatteri*	*Temperaturføler, vandvarmeflade*	*Lämpötila-anturi, vesipatteri*
DA1	*Avkastspjeld*	*Exhaust air damper*	*Avluftsspjäll*	*Spjæld, udsugningsluft*	*Sulkupelti, poistoilma*
DA2	*Uteluftspjeld*	*Outside air damper*	*Uteluftsspjäll*	*Spjæld, udeluft*	*Sulkupelti, ulkoilma*
EB1	*Ettervarmebatteri, elektrisk*	*Heating battery, electrical*	*Eftervärmebatteri, elektriskt*	*Eftervarmeflade, elektrisk*	*Lämmityspatteri, sähkö*
F1	*Sikring*	*Fuse*	*Säkring*	*Sikring*	*Sulake*
F10	*Overopphetningstermostat EB1* *Manuell reset*	*Thermostat overheating EB1* *Manual reset*	*Överhettningstermostat EB1* *Manuell återställning*	*Overophedningstermostat EB1* *Manuel resetfunktion*	*Ylilämpötermostaatti EB1* *Manuaalinen nollaus*
F20	*Overhetningstermostat EB1* *Automatisk reset*	*Thermostat overheating EB1* *Automatic reset*	*Överhettningstermostat EB1* *Automatisk återställning*	*Overophedningstermostat EB1* *Automatisk reset*	*Termostaatti EB1* *Automaattinen nollaus*
M1	*Tilluftsvifte*	*Supply air fan*	*Tilluftsfläkt*	*Indsugningsventilator*	*Tuloilmapuhallin*
M2	*Avtrekksvifte*	*Extract air fan*	*Frånluftsfläkt*	*Udsugningsventilator*	*Poistoilmapuhallin*
M4	*Rotormotor*	*Rotor motor*	*Rotormotor*	*Rotormotor*	*It-kiekon mootori*
P1	*Trykkvakt, EB1*	*Pressure Guard, EB1*	*Tryckvakt, EB1*	*Pressostat, EB1*	*Paine-eroanturi, EB1*
P10	*Rotorvakt*	*Rotation detector*	*Rotationsvakt*	*Rotations detektor*	*Pyöritys ilmaisin*
S1	*Styrepanel*	*Control panel*	*Styrpanel*	*Styrepanel*	*Ohjauspaneeli*
T1	*Transformator*	*Transformer*	*Transformator*	*Transformator*	*Muuntaja*
WB1	*Ettervarmebatteri, vann*	*Heating battery, water based*	*Eftervärmebatteri, vatten*	*Eftervarmeflade, vand*	*Lämmityspatteri, vesi*
X1	*Rekkeklemme, forsyning*	*Connector, supply voltage*	*Anslutningsplint, matning*	*Rækkeklemmer indgående forsyning*	*Riviliittimet – sisääntulevaa syöttöä varten*
X100	*ISDN skjøtekontakt*	*RJ45 contact*	*RJ45 skarvkontakt*	*RJ45-samlemuffe*	*RJ45-liitäntä*
X101	*RJ12 skjøtekontakt*	*RJ12 contact*	*RJ12 skarvkontakt*	*RJ12-samlemuffe*	*RJ12-liitäntä*
X102	*Skjøtekontakt*	*Contact*	*Skarvkontakt*	*Samlemuffe*	*Liitäntä*
E1, E2	*EMC-filter*	*EMC filter*	*EMC-filter*	*EMC-filter*	*EMC-suodatin*