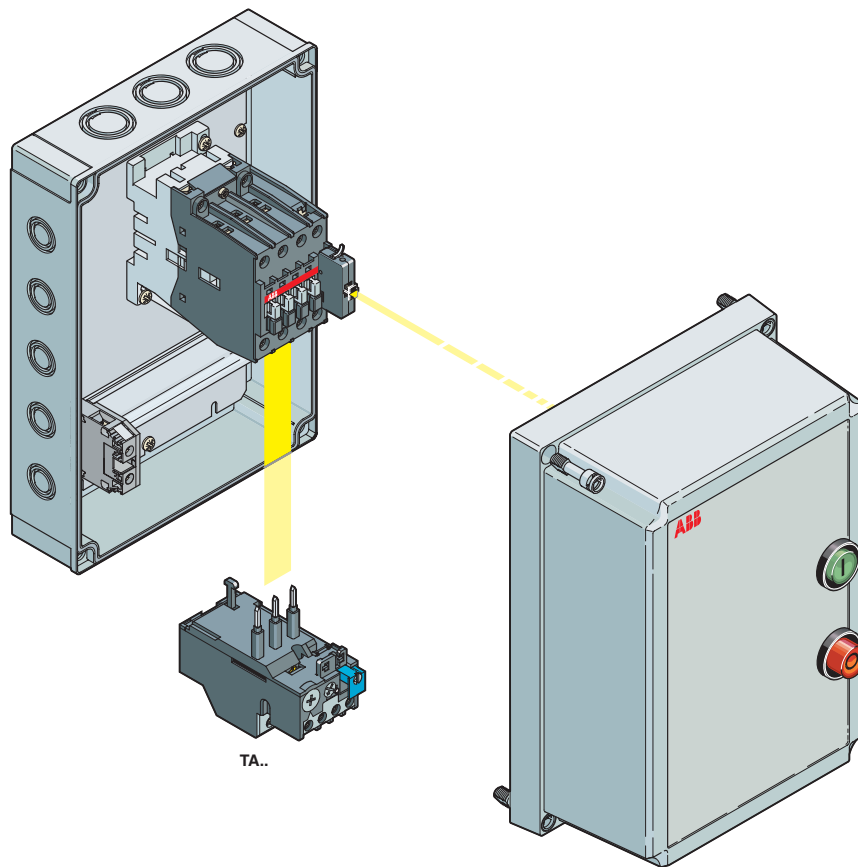


Enclosed D.O.L. Starters

Protection by Thermal O/L Relay



E1365D1

DRA.. version

>> DWA, DYA, DRA, DEA enclosed D.O.L. starters	page 7/1
>> Enclosed D.O.L. starters in kit form	page 7/10

DWA, DYA, DRA, DEA

Enclosed D.O.L. Starters

Protection by Thermal O/L Relay



DYA 9-30



DRA 40-30 + TA 42 DU



DEA 50-30



DEA 110-30

Application

- Starters for the control of three-phase asynchronous motors
- up to an operational voltage of 690 V, 50 or 60 Hz,
 - for a starting time of 1.5 s maximum,
and a switching frequency ≤ 15 starts/hour with a load factor of 80 %
or ≤ 30 starts/hour with a load factor of 50 %,
 - at an ambient temperature ≤ 40 °C around the enclosure,
 - in conformity with EN 60947-4-1/IEC 947-4-1 standards.

Description

Each starter is delivered assembled, cabled by us and contains:

- 1 three-pole contactor. Rating from 9 to 110 A AC-3, 400 V.
- 1 hold-in contact.
- The space for the thermal O/L relay.
The thermal O/L relay will be chosen according to motor nominal current and supplied separately in kit form.
The plunger index will be positioned on R/O.
- Two control circuit connection versions:
 - phase-to-phase control supply,
 - control supply for you to connect: separate supply, or phase-to-neutral.
- 1 PE terminal for connection of the external protective conductor (on DWA, DYA and DRA enclosures).
- 1 earth bonding terminal (on DEA enclosure).
- 1 enclosure equipped with:
 - 1 green flush "I" ON pushbutton,
 - 1 red protruding "O" OFF/RESET pushbutton.

>> Ordering details	page 7/2	>> Accessories	page 7/4
>> Starters in kit form	page 7/10	>> Empty enclosures	page 7/5
>> Wiring diagrams	page 7/6	>> Dimensions	page 7/8

DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



Ordering details (Order the thermal O/L relay separately, see page 7/3)

Rated operat. current AC-3 400 V A	Power AC-3 4-pole motor - 50/60 Hz 380 V 400 V 415 V 690 V kW kW kW			Short-circuit protection * Type 2 co-ordination as per EN 60947-4-1/IEC 947-4-1 380-400 V aM fuses gG fuses		Type State control voltage ☐	Order code to be completed with the following codes - control voltage ☐ - control supply ☐	Weight in kg Packing 1 piece
Starters in IP 43 plastic enclosure - Fire resistance as per UL 94 V0								
9	4	4	5.5	10	25	DWA 9-30 ☐	1SBK 140 ☐ 18R8 ☐ 00	0.810
12	5.5	5.5	7.5	16	32	DWA 12-30 ☐	1SBK 160 ☐ 18R8 ☐ 00	0.810
17	7.5	9	9	20	32	DWA 16-30 ☐	1SBK 180 ☐ 18R8 ☐ 00	0.810
Starters in IP 65 plastic enclosure - Fire resistance as per UL 94 V0								
9	4	4	5.5	10	25	DYA 9-30 ☐	1SBK 140 ☐ 28R8 ☐ 00	0.810
12	5.5	5.5	7.5	16	32	DYA 12-30 ☐	1SBK 160 ☐ 28R8 ☐ 00	0.810
17	7.5	9	9	20	32	DYA 16-30 ☐	1SBK 180 ☐ 28R8 ☐ 00	0.810
Starters in IP 65 plastic enclosure - Fire resistance as per UL 94 V2								
26	11	11	15	25	50	DRA 26-30 ☐	1SBK 240 ☐ 22R8 ☐ 00	2.450
32	15	15	18.5	32	63	DRA 30-30 ☐	1SBK 280 ☐ 22R8 ☐ 00	2.560
37	18.5	18.5	22	40	80	DRA 40-30 ☐	1SBK 320 ☐ 22R8 ☐ 00	2.560
Starters in IP 55 sheet metal enclosure								
50	22	25	30	50	100	DEA 50-30 ☐	1SBK 350 ☐ 42R8 ☐ 00	3.330
65	30	37	37	63	125	DEA 63-30 ☐	1SBK 370 ☐ 42R8 ☐ 00	4.460
75	37	40	40	100	160	DEA 75-30 ☐	1SBK 410 ☐ 42R8 ☐ 00	4.460
Starters in IP 66 sheet metal enclosure								
96	45	55	55	125	200	DEA 95-30 ☐	1SFK 430 0 33 R8 ☐ 00	10.00
110	55	59	75	160	200	DEA 110-30 ☐	1SFK 450 0 33 R8 ☐ 00	10.00

* For other short-circuit protection devices, please consult our co-ordination tables.

Control supply code ☐

The control circuit is to be connected by you: code 0

DA Cod0G

Control voltage code 8 ☐

The control circuit is supplied phase-to-phase: code 1

DA Cod1

Available for voltages in the shaded area opposite (D.A 9 ... DEA 75)

Voltage V 50 Hz	V 60 Hz	Code 8 ☐
24	24	1
42	42	2
48	48	3
110	110 ... 120	4
110 ... 115	115 ... 127	9
220 ... 230	230 ... 240	0
230 ... 240	240 ... 260	8
380 ... 400	400 ... 415	5
400 ... 415	415 ... 440	6

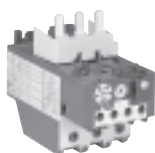
DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



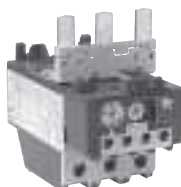
DYA 9-30 SB



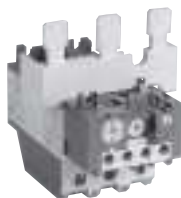
TA 25 DU



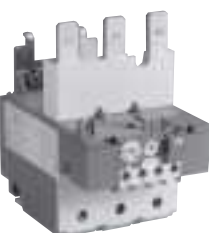
TA 42 DU



TA 75 DU



TA 80 DU



TA 110 DU

Version without pushbutton

Enclosure	Type	Order code to be completed with the following codes - control voltage ☐ - control supply ☐ (see page 7/2)	Weight in kg Packing 1 piece
IP65 plastic ☐ fire resistance as per UL 94 V0	DYA 9-30 SB ☐ DYA 12-30 SB ☐ DYA 16-30 SB ☐	1SBK 140 ☐ 26R8 ☐ 00 1SBK 160 ☐ 26R8 ☐ 00 1SBK 180 ☐ 26R8 ☐ 00	0.780 0.780 0.780
IP65 plastic ☐ fire resistance as per UL 94 V2	DRA 26-30 SB ☐ DRA 30-30 SB ☐ DRA 40-30 SB ☐	1SBK 240 ☐ 20R8 ☐ 00 1SBK 280 ☐ 20R8 ☐ 00 1SBK 320 ☐ 20R8 ☐ 00	2.410 2.520 2.520
IP55 sheet metal	DEA 50-30 SB ☐ DEA 63-30 SB ☐ DEA 75-30 SB ☐	1SBK 350 ☐ 40R8 ☐ 00 1SBK 370 ☐ 40R8 ☐ 00 1SBK 410 ☐ 40R8 ☐ 00	3.280 4.410 4.410

Consult us for other versions

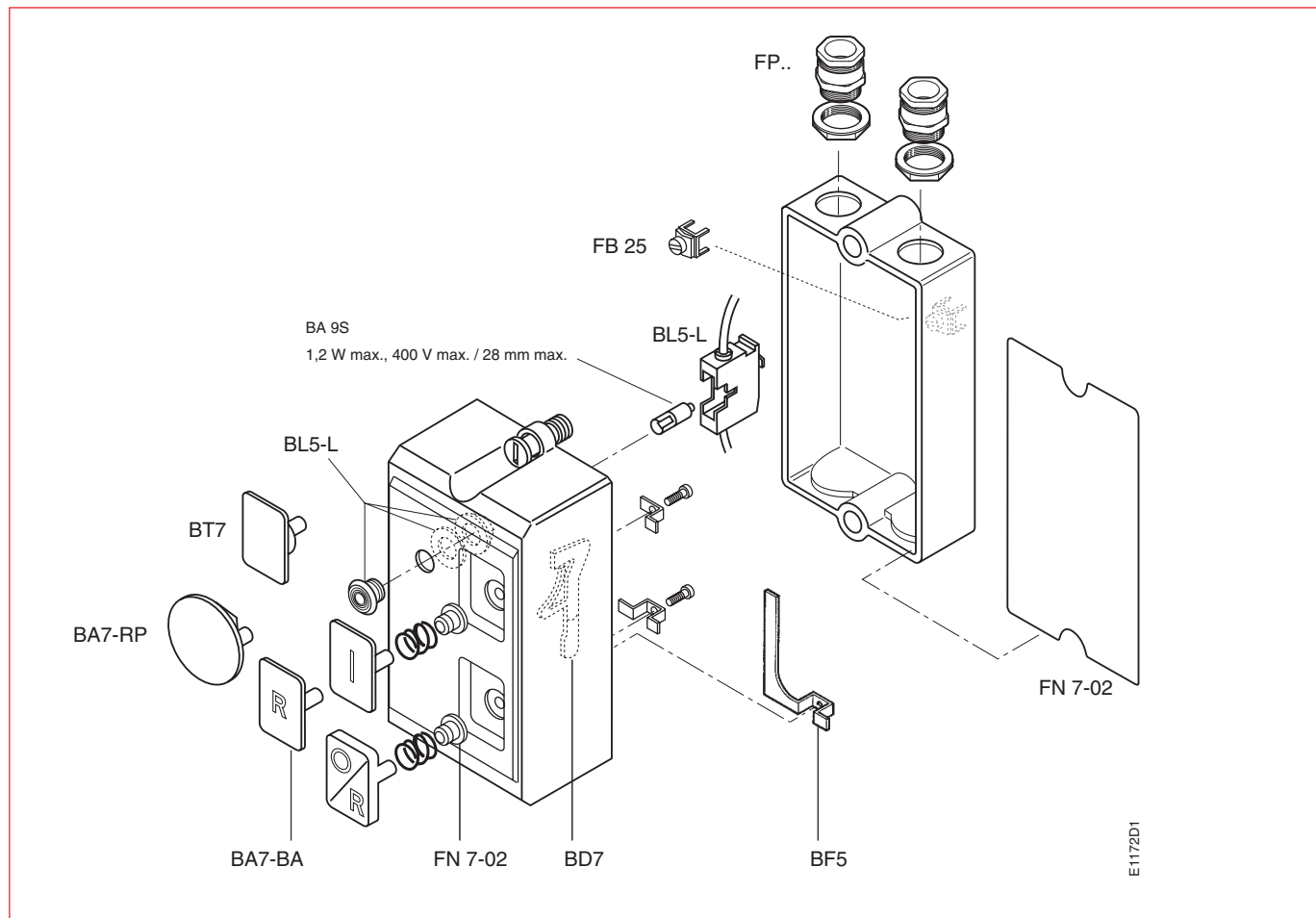
Ordering details, thermal O/L relays

Starter	Setting range	Type	Order code	Weight in kg Packing 1 piece
	A ... A			
D.A 9-30	0.1 ... 0.16	TA 25 DU 0.16	1SAZ 21 1201 R1005	0.150
to	0.16 ... 0.25	TA 25 DU 0.25	1SAZ 21 1201 R1009	0.150
D.A 30-30	0.25 ... 0.4	TA 25 DU 0.4	1SAZ 21 1201 R1013	0.150
	0.4 ... 0.63	TA 25 DU 0.63	1SAZ 21 1201 R1017	0.150
	0.63 ... 1.0	TA 25 DU 1.0	1SAZ 21 1201 R1021	0.150
	1.0 ... 1.4	TA 25 DU 1.4	1SAZ 21 1201 R1023	0.150
	1.3 ... 1.8	TA 25 DU 1.8	1SAZ 21 1201 R1025	0.150
	1.7 ... 2.4	TA 25 DU 2.4	1SAZ 21 1201 R1028	0.150
	2.2 ... 3.1	TA 25 DU 3.1	1SAZ 21 1201 R1031	0.150
	2.8 ... 4.0	TA 25 DU 4.0	1SAZ 21 1201 R1033	0.150
	3.5 ... 5.0	TA 25 DU 5.0	1SAZ 21 1201 R1035	0.150
	4.5 ... 6.5	TA 25 DU 6.5	1SAZ 21 1201 R1038	0.150
	6.0 ... 8.5	TA 25 DU 8.5	1SAZ 21 1201 R1040	0.150
	7.5 ... 11	TA 25 DU 11	1SAZ 21 1201 R1043	0.150
	10 ... 14	TA 25 DU 14	1SAZ 21 1201 R1045	0.150
	13 ... 19	TA 25 DU 19	1SAZ 21 1201 R1047	0.150
	18 ... 25	TA 25 DU 25	1SAZ 21 1201 R1051	0.150
	24 ... 32	TA 25 DU 32	1SAZ 21 1201 R1053	0.170
DRA 40-30	18 ... 25	TA 42 DU 25	1SAZ 31 1201 R1001	0.330
	22 ... 32	TA 42 DU 32	1SAZ 31 1201 R1002	0.330
	29 ... 42	TA 42 DU 42	1SAZ 31 1201 R1003	0.330
DEA 50-30	18 ... 25	TA 75 DU 25	1SAZ 32 1201 R1001	0.330
to	22 ... 32	TA 75 DU 32	1SAZ 32 1201 R1002	0.330
DEA 75-30	29 ... 42	TA 75 DU 42	1SAZ 32 1201 R1003	0.330
	36 ... 52	TA 75 DU 52	1SAZ 32 1201 R1004	0.330
	45 ... 63	TA 75 DU 63	1SAZ 32 1201 R1005	0.330
	60 ... 80	TA 75 DU 80	1SAZ 32 1201 R1006	0.330
DEA 95-30	29 ... 42	TA 80 DU 42	1SAZ 33 1201 R1003	0.360
and	36 ... 52	TA 80 DU 52	1SAZ 33 1201 R1004	0.360
DEA 110-30	45 ... 63	TA 80 DU 63	1SAZ 33 1201 R1005	0.360
	60 ... 80	TA 80 DU 80	1SAZ 33 1201 R1006	0.360
DEA 95-30 and	65 ... 90	TA 110 DU 90	1SAZ 41 1201 R1001	0.750
DEA 110-30	80 ... 110	TA 110 DU 110	1SAZ 41 1201 R1002	0.750

DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



Ordering details, DWA and DYA starter enclosure accessories



Description	Type	Order code	Pack- ing	Weight in kg
Blue flush RESET pushbutton	BA7-BA	FPTN 472615 R0004	1	0.015
Red "OFF" mushroom headed button	BA7-RP	FPTN 472615 R0003	1	0.021
"ON" pushbutton interlocking lever	BD7	FPMP 307404 P0001	10	0.003
Blanking plate	BT 7	FPTN 472637 R0001	1	0.015
Lamp holder (lamp not supplied), delivered with 3 lenses (colourless, red, green)	BL5-L	1SBN 070054 R1000	1	0.022
Neutral terminal	FB 25	FPTN 472627 R0001	1	0.005
Sealing gasket set	FN 7-02	FPTN 472619 R0001	1	0.005
Actuator lever for "Stop" function on contactor itself equipped with front mounted CB5-01 (place 5L3 - 6T3)	BF5	1SBN 111402 R1000	1	0.012
Impulse contact "Stop" with built-in terminal leads	CB5-01	1SBN 010013 R 1001	1	0.012

Ordering details, enclosure cable glands

Description	Type	Order code	Pack- ing	Weight in kg
ISO 20 cable gland	FP20	1SBN 110312 R1000	2	0.008
ISO 25 cable gland	FP25	1SBN 110313 R1000	2	0.016
ISO 32 cable gland	FP32	1SBN 110314 R1000	2	0.027
ISO 40 cable gland	FP40	1SBN 110315 R1000	2	0.048

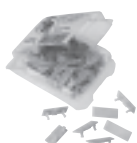
DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



DYA 9-30 SB



FE 50-12 VARS



BA5-50



CA5-10



CB5-10



CAL 5-11



LK 75-L



LP16

Coil voltage code for DS 25-A/DR 25-A

Voltage (V) 50 / 60 Hz	Coil voltage code	
24	1	
48	2	
110	3	
220 / 230	5	
500	6	

Ordering details, empty enclosures without pushbutton

For starters	Type	Order code	Pack- ing	Weight in kg
DYA 9 ... DYA 16	FY 16.12 SB	FPTN 372630 R0055	1	0.400
DRA 26 ... DRA 40	FR 40.12 SB	1SBN 103220 R1000	1	1.810
DEA 50	FE 45.12 SB	FPTN 372206 R0004	1	2.200
DEA 63 ... DEA 75	FE 85.12 SB	FPTN 372208 R0004	1	3.300

Ordering details, empty enclosures with pushbuttons

1 green flush "ON" pushbutton and 1 red protruding "OFF" pushbutton

For starters	Type	Order code	Pack- ing	Weight in kg
DWA 9 ... DWA 16	FW 16.12 VARS	FPTN 372630 R0050	1	0.500
DYA 9 ... DYA 16	FY 16.12 VARS	FPTN 372630 R0051	1	0.500
DRA 26	FR 26.12 VARS	1SBN 102422 R1000	1	1.850
DRA 30	FR 30.12 VARS	1SBN 102822 R1000	1	1.850
DRA 40	FR 40.12 VARS	1SBN 103222 R1000	1	1.850
DEA 50	FE 50.12 VARS	FPTN 372206 R0025	1	2.280
DEA 63, DEA 75	FE 75.12 VARS	FPTN 372208 R0019	1	3.410
DEA 95, DEA 110	FE 110.12 VARS	1SFN 104333 R1000	1	7.000

Ordering details, contactor accessories

Description	Type	Order code	Pack- ing	Weight in kg
Function markers (50 pieces)	BA5-50	1 SBN 11 0000 R1000	box	0.017
1 x "N.O." auxiliary contact block	CA5-10	1 SBN 01 0010 R1010	10	0.014
1 x "N.C." auxiliary contact block	CA5-01	1 SBN 01 0010 R1001	10	0.014
"N.O."+"N.C." side-mtd cont. blk	CAL5-11	1 SBN 01 0020 R1011	2	0.050
1 x "N.O." impulse contact block	CB5-10	1 SBN 01 0013 R1010	1	0.012
1 x "N.C." impulse contact block	CB5-01	1 SBN 01 0013 R1001	1	0.012
Control lead terminals (A 50 ... A 75)				
Right/left connection	LK 75-L	1 SBN 07 3552 R1003	2	0.006
Front connection	LK 75-F	1 SBN 07 3552 R1002	2	0.006
Control lead terminals (A 95, A 110)				
Right/left connection	LK 110	1 SFN 07 4352 R1000	2	0.010
Lamp holder (1)	BL-5L	1 SBN 07 0054 R1000	1	0.022
Fuse holder (1)	BL-5F	1 SBN 07 0055 R1000	1	0.020
Connecting strip (A 9 ...16)	LP 16	FPEP 407 000 R0001	10	0.002
Connecting strip (A 26)	LP 25	FPEP 407 001 R0001	10	0.004
Connecting strip (A 95 / 110)	LY 110	1 SFN 07 4303 R1000	1	0.055
Add. terminal block (A 95 / A 110)	LD 110	1 SFN 07 4308 R1000	1	0.150
Terminal enlargement pieces (set of 3 bars) for A 95 / A 110	LW 110	1 SFN 07 4307 R1000	1	0.100

(1) for DWA ... and DYA only

Ordering details, thermal O/L relay accessories

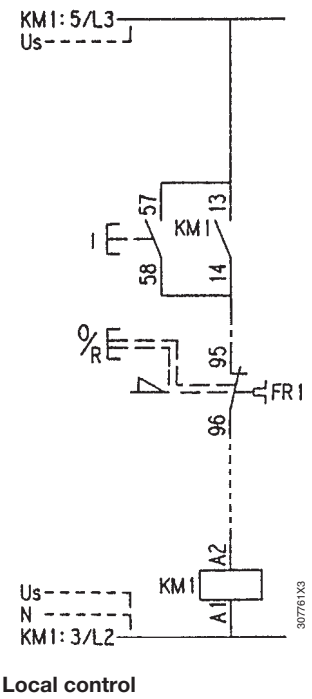
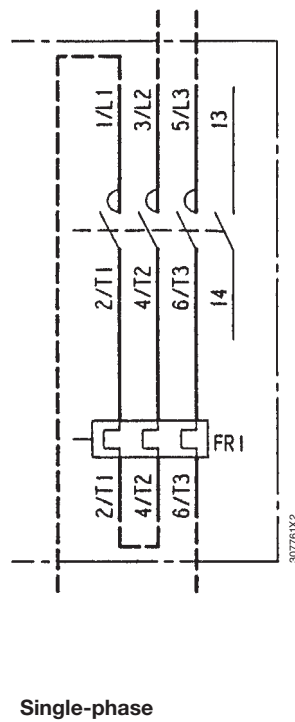
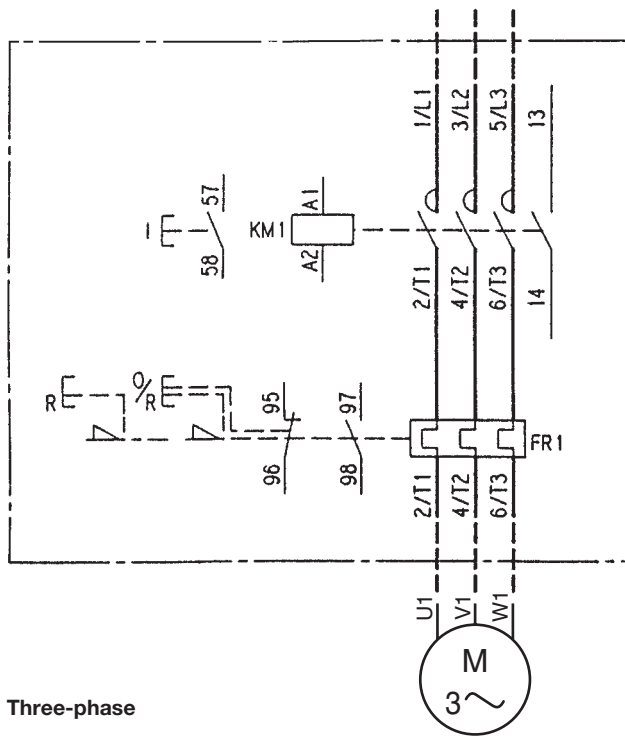
Description	Type	Order code	Pack- ing	Weight in kg
	State coil voltage	to be completed with the coil voltage code		
Function markers (50 pieces)	BA5-50	1SBN 11000 R1000	box	0.017
Remote tripping coil for TA 25 DU	DS 25-A	1SAZ 201501 R000	1	0.100
Remote resetting coil for TA 25 DU	DR 25-A	1SAZ 201504 R000	1	0.100

7

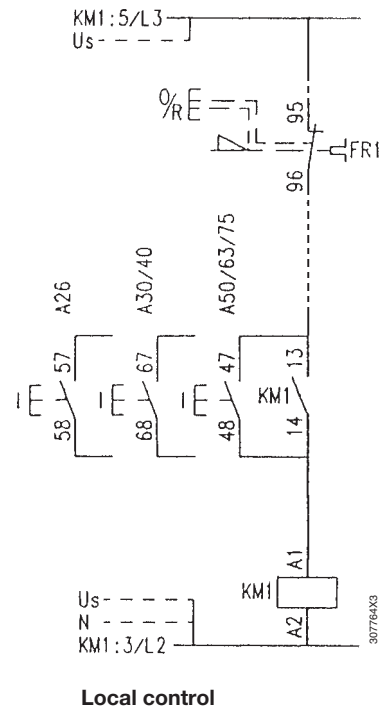
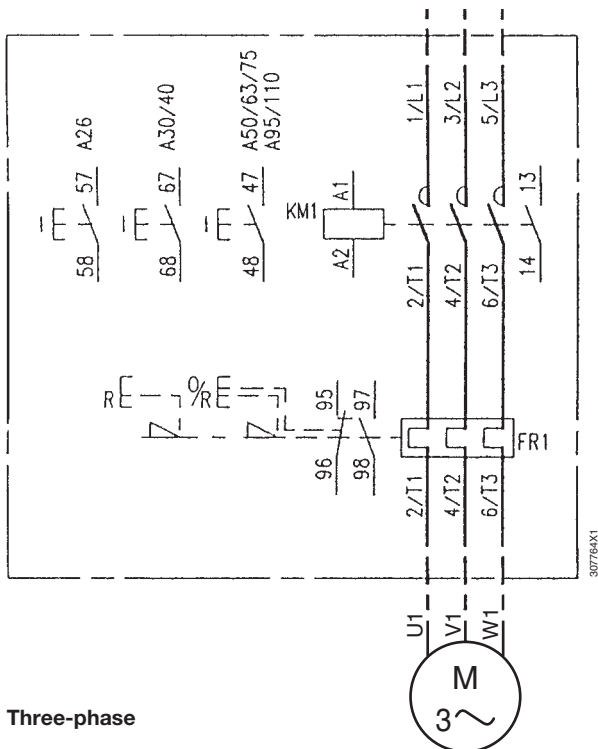
DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



D.A 9 ... D.A 16 wiring diagrams



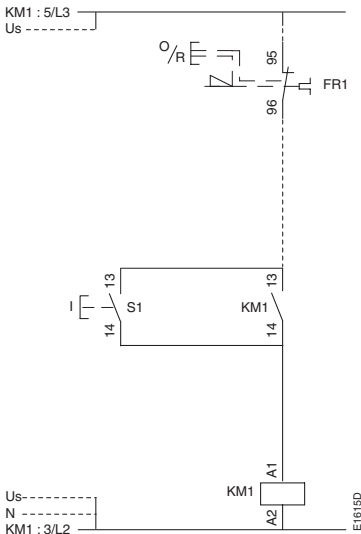
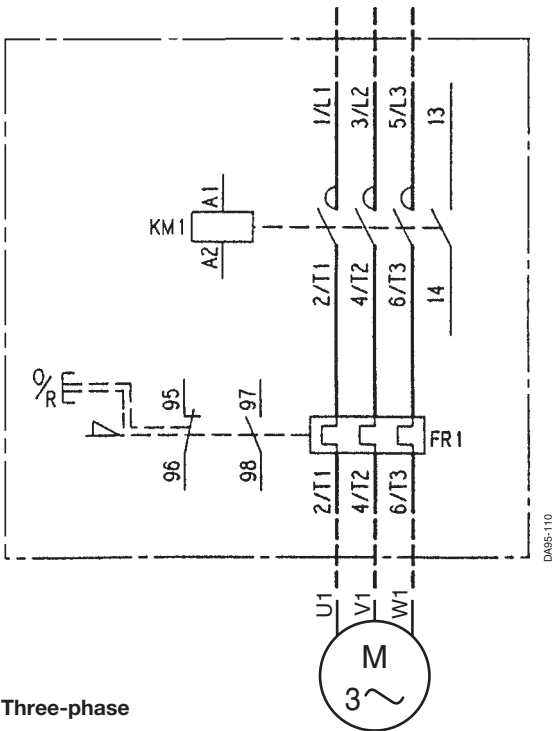
D.A 26 ... D.A 75 wiring diagrams



DWA, DYA, DRA, DEA
Enclosed D.O.L. Starters
Protection by Thermal O/L Relay



DEA 95, DEA 110 wiring diagrams



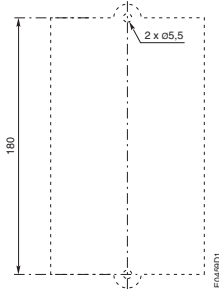
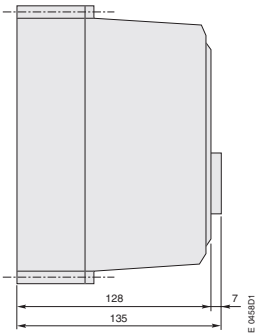
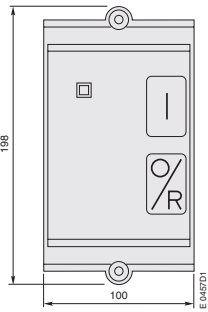
DWA, DYA, DRA, DEA

Enclosed D.O.L. Starters

Protection by Thermal O/L Relay

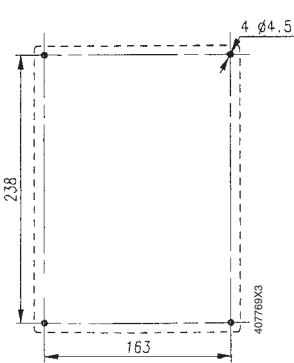
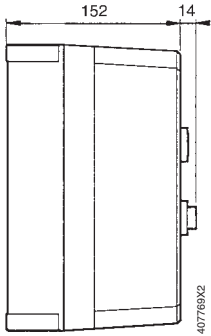
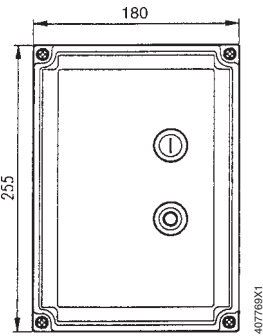


Dimensions (in mm)



Cable inlets	Cable outlets
Enclosure top	Enclosure bottom
2 x Ø 20.5/25.5	2 x Ø 20.5/25.5
Ø 20.5 for ISO 20	
Ø 25.5 for ISO 25	

D.A 9 ... D.A 16



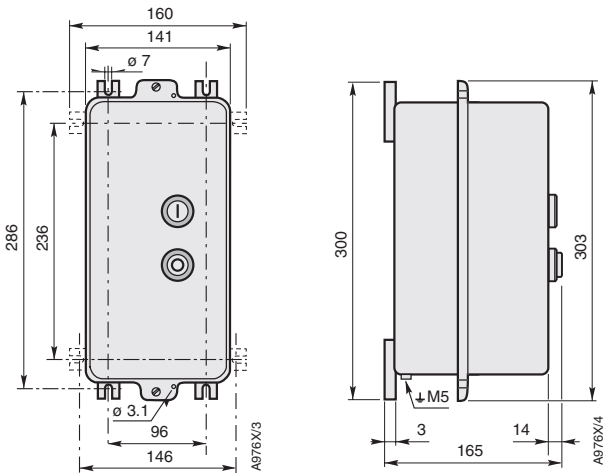
Cable inlets	Cable outlets
Enclosure top	Enclosure bottom
3 x Ø 20.5/32.5	3 x Ø 20.5/32.5
Ø 20.5 for ISO 20	
Ø 32.5 for ISO 32	

DRA 26 ... DRA 40

DWA, DYA, DRA, DEA Enclosed D.O.L. Starters Protection by Thermal O/L Relay



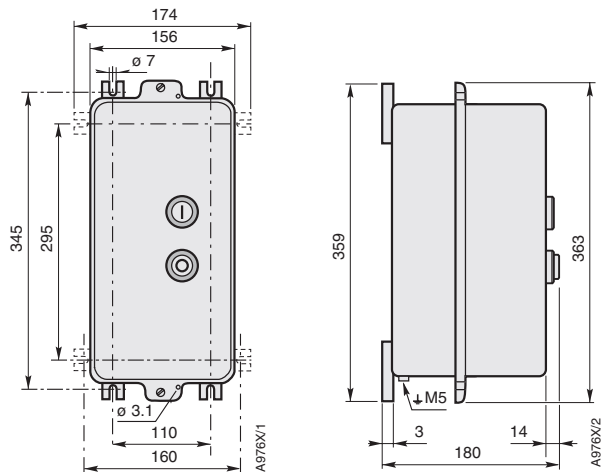
Dimensions (in mm)



DEA 50

Cable inlets	Cable outlets
Enclosure top	Enclosure bottom
2 x $\varnothing$ 32.5	2 x $\varnothing$ 32.5

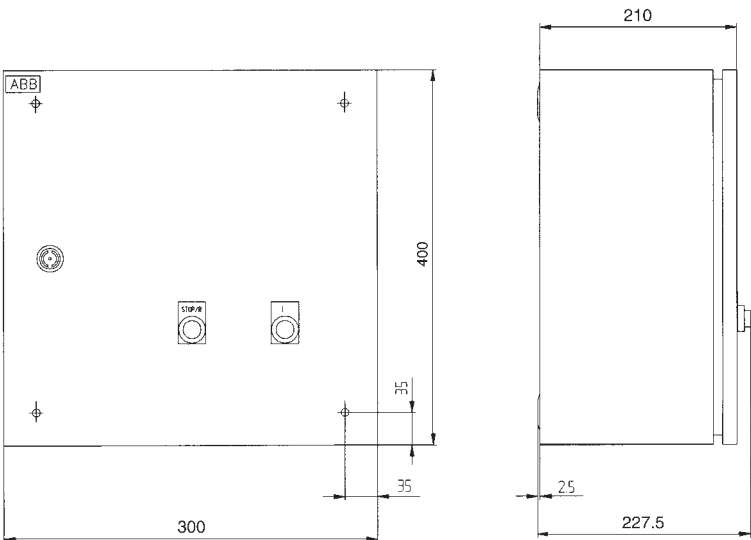
$\varnothing$ 32.5 for ISO 32



DEA 63, DEA 75

Cable inlets	Cable outlets
Enclosure top	Enclosure bottom
1 x $\varnothing$ 20.5	1 x $\varnothing$ 20.5
1 x $\varnothing$ 40.5	2 x $\varnothing$ 40.5

$\varnothing$ 20.5 for ISO 20
 $\varnothing$ 40.5 for ISO 40



DEA 95, DEA 110