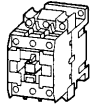
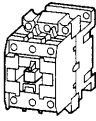
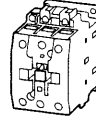
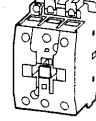
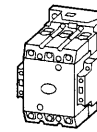


DIL Contactors

Technical Overview

DILM contactors 3-pole

														
	DIL		EEM	EM	00 M	00AM	0M	0AM	1M	1AM	2M	2AM	3M80	3AM85
Basic units	Page		05/009	05/009	05/011	05/011	05/011	05/011	05/011	05/011	05/011	05/011	05/013	05/013
Complete units	Page		–	–	05/014	05/014	05/014	05/014	05/014	05/014	05/014	05/014	05/016	05/016
Rated operational voltage			kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW

AC-3

Max. three-phase motor rating
50 – 60 Hz

220 V–230 V	1.5	2.2	2.2	3	4	5.5	7.5	11	15	18.5	22	25
380 V–400 V	3	4	4	5.5	7.5	11	15	18.5	22	30	37	45
440 V	3.3	4.6	4.6	6.4	8.4	13	17	20	25	35	44	52
500 V	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55
660 V–690 V	3	4	5.5	7.5	11	15	18.5	22	30	37	55	75
1000 V	–	–	–	–	–	–	–	–	–	–	37	45

AC-4

Max. three-phase motor rating
50 – 60 Hz

220 V–230 V	1.1	1.5	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22
380 V–400 V	2.2	3	3	4	5.5	7.5	11	15	18.5	22	30	37
440 V	2.4	3.3	3.3	4.4	6.2	8.4	12.5	17	20.3	25.3	35	43
500 V	2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45
660 V–690 V	2.2	3	4	5.5	7.5	11	15	18.5	22	30	45	45
1000 V	–	–	–	–	–	–	–	–	–	–	30	37

AC-1

Max. three-phase motor rating

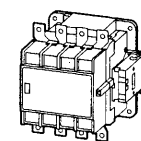
220 V–230 V	7	7	7	7	12.5	12.5	20	20	32	32	35	35
380 V–400 V	13	13	13	13	22	22	35	35	56	56	62	62
440 V	15	15	15	15	25	25	40	40	65	65	72	72
500 V	16	16	16	16	29	29	45	45	74	74	82	82
660 V–690 V	20	20	20	20	35	35	60	60	95	95	108	108
1000 V	–	–	–	–	–	–	–	–	–	–	82	82

Conventional free air thermal current
 $I_{th} = I_e$ open

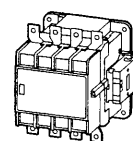
	A	A	A	A	A	A	A	A	A	A	A	A
Up to 690 V	20	20	20	20	35	35	55	55	90	90	100	100
1000 V	–	–	–	–	–	–	–	–	–	–	100	100

DILP contactors 4-pole

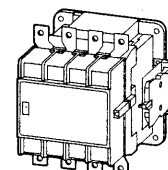
DIL



P160



P250



P315

Rated operational voltage

AC-1

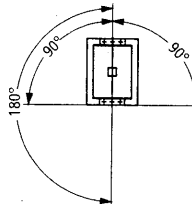
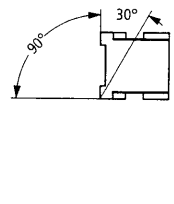
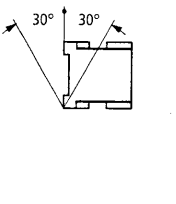
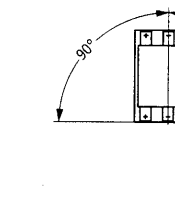
Rated operational current Δ
conventional free air thermal
current $I_{th} = I_e$ open

	A	A	A
Up to 690 V	160	250	315
1000 V	160	250	315

DIL Contactors

Technical Data

Contactors

Contactors			DIL00M DIL00AM DIL00BM	DIL0M DIL0AM	DIL1M DIL1AM	DIL2M DIL2AM	DIL3M80 DIL3AM85
General technical data							
Standards			IEC/EN 60 947, VDE 0660, CSA, UL				
Lifespan, mechanical							
AC operated	Operations × 10 ⁶		10	10	10	10	10
DC operated	Operations × 10 ⁶		10	10	10	10	3
Maximum operating frequency, mechanical							
AC operated	Ops./h		7000	9000	9000 5000	5000	5000
DC operated	Ops./h		9000	9000 5000	5000	5000	1000
Maximum operating frequency, electrical							
Contactors without overload relay	Page		05/070	05/070	05/070	05/070	05/070
Climatic proofing			Damp heat, constant, to IEC 60 068-2-3/Damp heat, cyclical, to IEC 60 068-2-30				
Ambient temperature							
Open	Min./Max.	°C	-25/+50	-25/+50	-25/+50	-25/+50	-25/+60
Enclosed ¹⁾	Min./Max.	°C	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40
Storage temperature	Min./Max.	°C	-	-	-	-	-40/+80
Mounting position			a) DIL00M to DILM500	b) DIL00M to DIL2AM AC operation	c) DIL00M-G to DIL2AM-G DC operation, DIL3M80 – DILM820	d) DILM580 to DILM820	
							
Mechanical shock resistance (half-sinusoidal shock: 20							
Main contacts							
Make contact	AC	g	10	8	8	8	10
Auxiliary contacts							
Make/break contacts	AC	g	10/6	8/6	8/6	8/6	10/8
Degree of protection			IP 20	IP 00	IP 00	IP 00	IP 00
Protection against direct contact from the front when actuated by a perpendicular test finger (IEC 536)			Finger and back-of-hand proof				
Dimensions			Page 05/093	Page 05/093	Page 05/093	Page 05/093	Page 05/094
Weight	AC op.	kg	0.32	0.42	0.71	0.95	2.0
	DC op.	kg	0.50	0.77	1.25	1.85	2.0
Terminal capacity (screw terminal; 1 or 2 conductors can be connected)							
Main cable:							
Solid ³⁾		mm ²	1 × (0.75 – 4)	1 × (1 – 6)	1 × (2.5 – 10)	1 × (2.5 – 16)	1 × (6 – 16)
		mm ²	2 × (0.75 – 4)	2 × (1 – 6)	2 × (2.5 – 10)	2 × (2.5 – 16)	2 × (6 – 16)
Flexible with ferrule		mm ²	1 × (0.75 – 4)	1 × (1 – 6)	1 × (2.5 – 16)	1 × (2.5 – 25)	1 × (4 – 50)
		mm ²	2 × (0.75 – 4)	2 × (1 – 6)	2 × (2.5 – 10)	2 × (2.5 – 10)	2 × (4 – 50)
Flexible with cable lug Min.		mm ²	-	-	-	-	-
	Max.	mm ²	-	-	-	-	-
Stranded		mm ²	-	-	1 × (10 – 25)	1 × (10 – 35)	16
		mm ²	-	-	2 × 10	2 × 10	50
Stranded with cable lug	Min.	mm ²	-	-	-	-	-
	Max.	mm ²	-	-	-	-	-
Solid or stranded	Min.	AWG	18	16	12	12	10
	Max.	AWG	10	10	4	2	2
Flat conductor ⁴⁾		mm	-	-	3 × 9 × 0.8	3 × 9 × 0.8	2 × (6 × 9 × 0.8)
		mm	-	-	2 × (3 × 9 × 0.8)	2 × (3 × 9 × 0.8)	-
		mm	-	-	6 × 9 × 0.8	6 × 9 × 0.8	-
Busbar		mm	-	-	-	-	-
	Width	mm	-	-	-	-	-

Notes

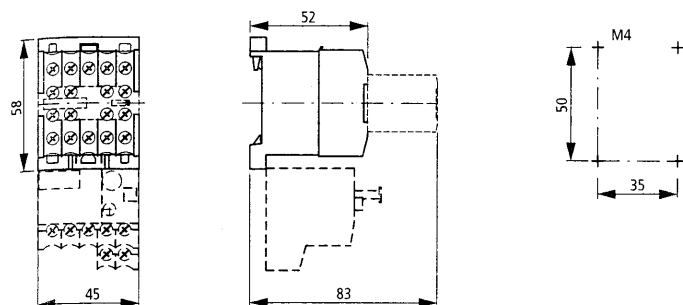
¹⁾ For suitable enclosure see → Page 05/064, 065
²⁾ From DIL3M80 half-sinusoidal shock: 10 ms

³⁾ Maximum of one size difference admissible when using 2 conductors

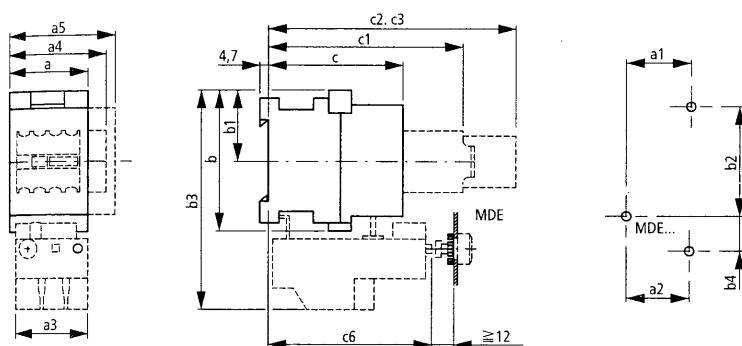
DILEM Mini Contactors, DIL Contactors

Dimensions

Mini contactors

DILE(E)M-...
DILE(E)M-...-G

Contactors

DIL00M to DIL2AM
DIL00M-G to DIL2AM-G

2 M4 × 16

DIL00(A)M
DIL0(A)M

2 M5 × 16

DIL1(A)M
DIL2(A)M

Maintain a minimum spacing of 5 mm between DC operated DIL00M-G to DIL2AM-G contactors mounted side by side.

DIL	00M 00AM 00BM 00M4	(-G) (-G) (-G) (-G)	0M 0AM	(-G) (-G)	1M 1AM	(-G) (-G)	2M 2AM	(-G) (-G)
a	45	(45)	45	(45)	60	(60)	70	(70)
a1	35	(35)	35	(35)	50	(50)	60	(60)
a4	—	—	55	(55)	70	(70)	80	(80)
a5	—	—	60	(60)	80	(80)	90	(90)
b	77	(77)	91	(91)	98	(98)	118	(118)
b1	39	(39)	46	(46)	49	(49)	59	(59)
b2	60	(60)	75	(75)	75	(75)	90	(90)
c (without HDIL)	74	(99)	79	(104)	97	(122)	102	(127)
c (with HDIL)	76.5	(101.5)	86.3	(113.3)	—	—	—	—
c1	107	(132)	112	(137)	130	(155)	135	(160)
c2	136	(161)	141	(166)	159	(184)	164	(189)
c3	136	(161)	—	—	—	—	—	—

Overload Relays

Z	00	00	1	1
a2	34	(34)	34	(34)
a3	45	(45)	60	(60)
b3	120	(120)	133	(133)
b4	19	(19)	18	(18)
c6	90	(115)	96	(121)

a4 = With side mounting auxiliary contact module on DIL0M to DIL2AM,

a5 = With NDIL...M 4th pole module

c1 = With ...DILM auxiliary contact module

c2 = With TP...11DIL pneumatic timer module

c3 = With V(-G)DIL mechanical latching module

