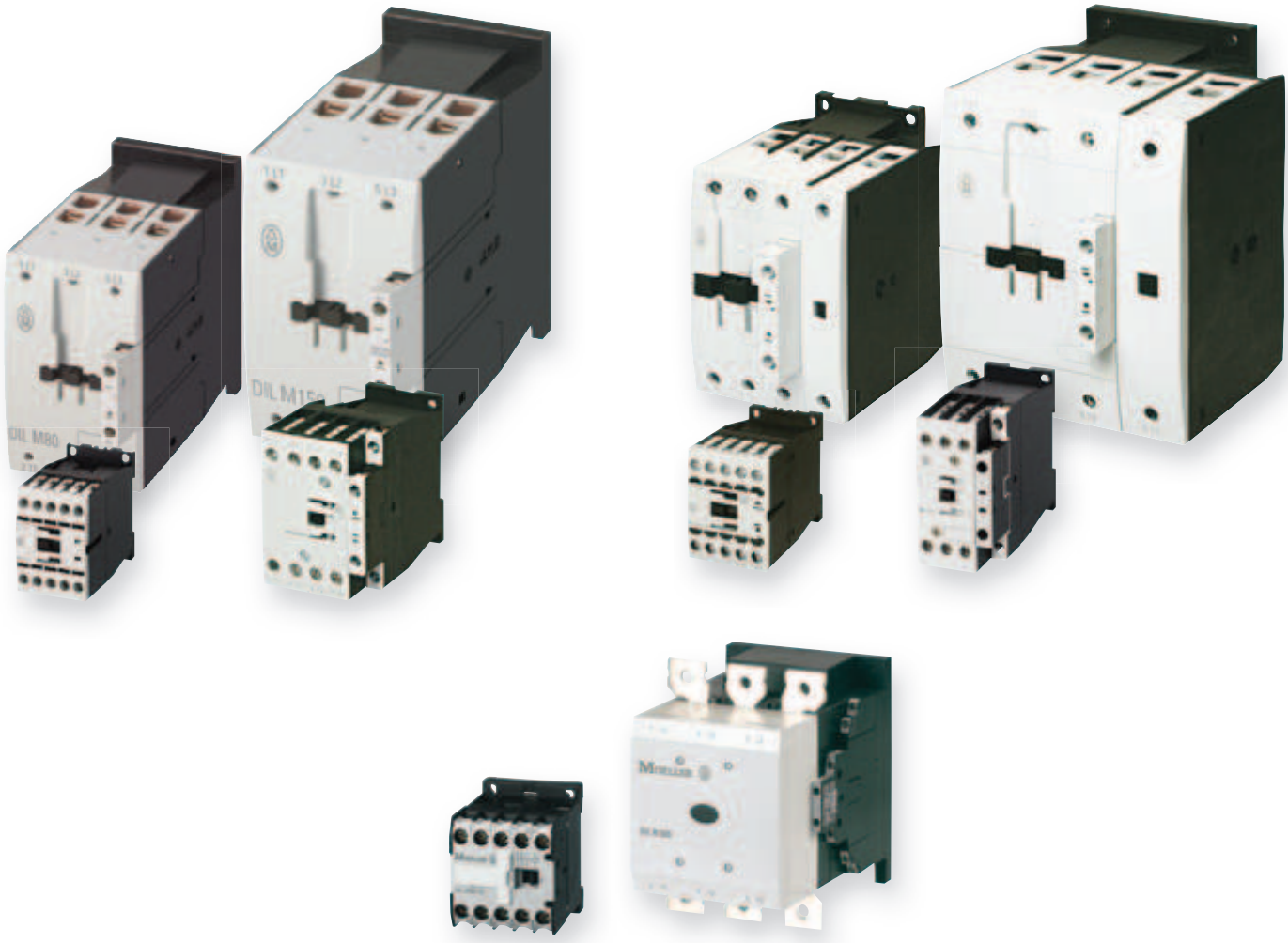


Mini contactor relays, contactor relay, contactors

Continual operation requires high operational reliability in the components used. The DILM contactor achieves the best lifespan values in AC-3 applications and is ideal for heavy AC-4 jogging.

Mini contactor relay DILE…,contactor relays, contactors up to 12 A AC-3 at 400 V
Compact dimensions for the highest packing densities +++ Extended performance range up to 5.5 kW at 400 V

AC and DC contactor system DILM…, contactor relays, 3 pole contactors up to 170 A AC-3 at 400 V, 4 pole contactors up to 200 A AC-1
Easier engineering through identical construction sizes for AC- and DC-operated contactors +++ Energy savings and higher packing density in control panel due to minimized heat dissipation +++ High wiring security through doubled box terminals +++ Less coupler relays: direct actuation from the PLC for contactors up to 32 A +++ Easy engineering through integrated suppressor circuits for DC +++ Uniform accessories for 3- and 4-pole contactors +++ Mechanical interlock double conductor run mountable without additional separation gap +++ Direct fieldbus connection through the communication system SmartWire-Darwin, through plug-in type protective module

High rated contactors - contactors up to 1600 A AC-3 at 400 V, contactors up to 2600 A AC-1
Compact dimensions with high switching power +++ Direct actuation from the PLC saves coupler relays +++ Easy engineering through wide range coils +++ Cost and energy savings for control panel ventilation due to reduced heat dissipation +++ Long lifespan through vacuum technology from 580 A

SmartWire-Darwin
The DIL product range offers contact elements which can be connected to the SmartWire-Darwin communication system. → Protective modules, Page 5/62



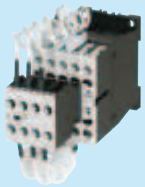
Eaton After Sales Service
Testing switching devices in compliance with regulations applicable to this technology
→ Chapter 22

















Ordering

Mini contactor relays DILER, DILEEM, DILEM

Mini contactor relays, contactors	5/2
Auxiliary contact modules	5/6
Accessories	5/8
Actuating voltages	5/70

DILA contactor relays

Contactor relays	5/10
Auxiliary contact modules	5/12
Actuating voltages	5/72

Technical overview

Contactors DILM, DILH	5/14

System overview

Contactors DILM, DILH	5/16

Ordering

Contactors DILM, DILH

Basic devices up to 170 A	5/18
Complete units up to 170 A	5/24
Contactors up to 150 A with electronic actuation	5/28
Standard devices greater than 170 A	5/30
Comfort devices greater than 170 A	5/32
Basic devices up to 200 A, 4 pole	5/36
Auxiliary contact modules	5/38

Engineering

Auxiliary contact modules	5/42

Ordering

DILK contactors for capacitors	5/43

Engineering

Contactors for power factor correction	5/44

Ordering

Lighting contactors DILL	5/45

Engineering

Lighting systems	5/46

Ordering

Star-delta combinations SDAINL	5/48

Engineering

Star-delta combinations SDAINL	5/50

Ordering

DIUL reversing combinations	5/52

Description

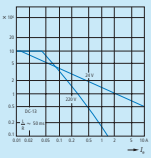
CMD contactor monitoring device	5/68

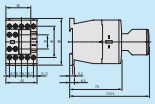
Ordering

CMD contactor monitoring device	5/68









Ordering

DILM contactor relays, DILM, DILH contactors

suppressor circuit	5/54
Accessories	5/56

Ordering

Actuating voltages contactors DILM, DILH

Basic devices up to 170 A	5/73
Basic devices up to 200 A, 4 pole	5/78
Contactors up to 150 A with electronic actuation	5/80
Replacement coils	5/75
Comfort devices greater than 170 A	5/81
Standard devices greater than 170 A	5/81
Electronic modules including coil	5/81
Contactors for capacitors	5/80

Engineering

Contact travel diagrams	5/82
Enclosure	5/83
UL/CSA-Approved rating data	5/84
UL/CSA Special Purpose Ratings	5/85
UL/CSA Short Circuit Current Rating	5/86
Contactors for resistive loads	5/88
Electrical life span	5/90
Short-time loading	5/94
Operating frequency	5/95
Switching of DC current	5/96

Technical data

Mini contactor relays, contactor relays	5/97
Contactor monitoring device	5/100
Basic devices up to 170 A	5/108
Basic devices up to 200 A, 4 pole	5/124
Comfort devices greater than 170 A	5/116
Standard devices greater than 170 A	5/116
Contactors for capacitors	5/127
Contactors up to 150 A with electronic actuation	5/130
Lighting contactors	5/129
Auxiliary contact modules	5/132
Accessories	5/133

Dimensions

Mini contactor relays	5/134
Contactor relays	5/135
Basic devices up to 170 A	5/135
Basic devices up to 200 A, 4 pole	5/137
Contactors larger than 170 A	5/138
Contactors for capacitors	5/140
Lighting contactors	5/140
Contactor combinations	5/141
Accessories	5/142

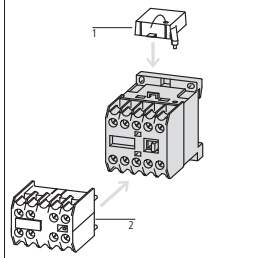
Ordering

Rated operational current AC-15 220 V 230 V 240 V I_e A	Rated operational current AC-15 380 V 400 V 415 V I_e A	Conventional free air thermal current I_{th} A	Contact N/O = normally open contact NC = normally closed contact		Distinctive number	Circuit symbol	For use with
DILER mini contactor relays							
Screw terminals							
	6	3	10	4 N/O	–	40E		DILE…
				3 N/O	1 NC	31E		DILE…
				2 N/O	2 NC	22E		DILE…

Notes
Coil terminal marking as specified in EN 50005
Contact numbers to EN 50011
The following applies to DC-operated contactors:
- Integrated diode-resistor combination
- Coil rating 2.6 W

Information relevant for export to North America

Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.: E29184
UL CCN: NKCR
CSA File No.: 012528
CSA Class No.: 3211-03
NA Certification: UL Listed, CSA certified

AC operation **Part no.** Article no.	**Price** See price list	**DC operation** **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILER-40(230V50HZ) 051759		**DILER-40-G(24VDC)** 010223		5 off	**With screw terminals:** 
DILER-31(230V50HZ) 051768		**DILER-31-G(24VDC)** 010157			
DILER-22(230V50HZ) 051777		**DILER-22-G(24VDC)** 010042			

Accessories **Page**
1 Suppressor → 5/8
2 Auxiliary contact modules → 5/6
Further actuating voltages → 5/70

Rated operational current	Max. motor rating for three-phase motors, 50 - 60 Hz						Conventional thermal current $I_{th} = I_e$ AC-1 at 50 °C		Contact		Circuit symbol	For use with
AC-3	AC-3			AC-4								
380 V 400 V	220 V 230 V	**380 V 400 V**	660 V 690 V	220 V 230 V	**380 V 400 V**	660 V 690 V	Open	Enclosed	N/O = normally open contact NC = normally closed contact			
I_e	P	P	P	P	P	P	$I_{th} = I_e$	$I_{th} = I_e$				
A	kW	**kW**	kW	kW	**kW**	kW	A	A				
DILEM contactors												
3 pole with auxiliary contact												
Screw terminals												
6.6	1.5	**3**	3	1.1	**2.2**	2.2	20	16	1 N/O	–		…DILEM DILE…
6.6	1.5	**3**	3	1.1	**2.2**	2.2	20	16	–	1 NC		DILE…
9	2.2	**4**	4	1.5	**3**	3	20	16	1 N/O	–		…DILEM DILE…
9	2.2	**4**	4	1.5	**3**	3	20	16	–	1 NC		DILE…
12	3.5	**5.5**	6.5	2	**3**	2.2	20	16	1 N/O	–		…DILEM DILE…
12	3.5	**5.5**	6.5	2	**3**	2.2	20	16	–	1 NC		DILE…
4 pole												
Screw terminals												
9	2.2	**4**	4	1.5	**3**	3	20	16	–	–		…DILEM DILE…

1)

Information relevant for export to North America

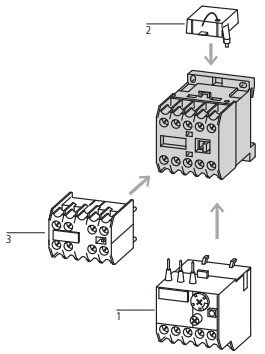
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL CCN	NLDX
CSA File No.	012528
CSA Class No.	3211-04
NA Certification	UL Listed, CSA certified
See also	→ Page 5/84

2)

Information relevant for export to North America

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL CCN	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
NA Certification	UL Listed, request filed for CSA

AC operation **Part no.** Article no.	**Price** See price list	DC operation **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILEEM-10(230V50HZ)[1] 051608		**DILEEM-10-G(24VDC)**[1] 051643		5 off	**With screw terminals:**
DILEEM-01(230V50HZ)[1] 051633		**DILEEM-01-G(24VDC)**[1] 051650			
DILEM-10(230V50HZ)[1] 051786		**DILEM-10-G(24VDC)**[1] 010213			
DILEM-01(230V50HZ)[1] 051795		**DILEM-01-G(24VDC)**[1] 010343			
DILEM12-10(230V50HZ)[2] 127075		**DILEM12-10-G(24VDC)**[2] 127132			
DILEM12-01(230V50HZ)[2] 127091		**DILEM12-01-G(24VDC)**[2] 127137			
DILEM4(230V50HZ)[1] 051804		**DILEM4-G(24VDC)**[1] 012701		5 off	



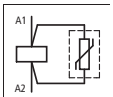
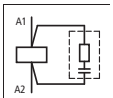
Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/8
3 Auxiliary contact module	→ 5/6
Enclosures totally insulated	
Further actuating voltages	→ 5/70
Accessories	→ 5/8

	Contact N/O = normally open contact S_F = NO early-make NC = normally closed contact $Ö_S$ = NC late-break				Rated operational current AC-15 220 V 230 V 240 V I_e A		Conventional thermal current I_{th} A	Distinctive number/type of combinations with basic device DILER-40(-G)	 DILER-31(-G)	 DILER-22
Auxiliary contact modules										
Screw terminals										
	2 pole	–	–	2 NC	–	4	2	10	–	–	–
		1 N/O	–	1 NC	–	4	2	10	–	–	–
	4 pole	2 N/O	–	2 NC	–	4	2	10	–	–	–
	2 pole	–	–	2 NC	–	4	2	10	42E	33	24
		1 N/O	–	1 NC	–	4	2	10	51E	42	33
		2 N/O	–	–	–	4	2	10	60E	51	42
		–	1 S_F	–	1 $Ö_S$	4	2	10	51	42	33
	4 pole	–	–	4 NC	–	4	2	10	44E	35	26
		1 N/O	–	3 NC	–	4	2	10	53E	44	35
		2 N/O	–	2 NC	–	4	2	10	62E	53	44
		3 N/O	–	1 NC	–	4	2	10	71E	62	53
		4 N/O	–	–	–	4	2	10	80E	71	62
		1 N/O	1 S_F	1 NC	1 $Ö_S$	4	2	10	62	53	44

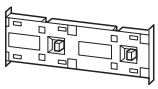
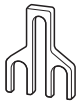
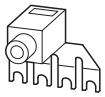
Information relevant for export to North America

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	012528
CSA Class No.	3211-03
NA Certification	UL Listed, CSA certified

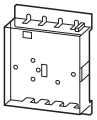
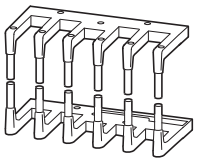
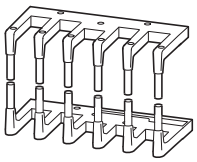
Circuit symbol	Can be combined with contactor	**Part no.** Article no.	**Price** See price list	Std. pack		**Notes**
	DILEM-10(-G)(…) DILEM-4(-G)(…) DILEEM-10(-G)(…) DILEM12-10(-G)(…)	**02DILEM** 010064		5 off	With interlocked opposing contacts	The following applies to ...DILEM auxiliary contacts: • Contacts to EN 50012 The following applies to ...DILE auxiliary contacts: • Contacts to EN 50005 Contacts according to EN50012 are to be prefered. Type E combinations compy with EN 50011 and are to be given preference. No interlocked opposing contacts in NO early-makes and NC late-breaks.
		**11DILEM** 010080				
		**22DILEM** 010112				
	DILEM-10(-G)(…) DILEM-01(-G)(…) DILEM-4(-G)(…) DILER40(-G) DILER31(-G) DILER22 DILEEM-10(-G)(…) DILEEM-01(-G)(…) DILEM12-10(-G)(…) DILEM12-01(-G)(…)	**02DILE** 010240				
		**11DILE** 010224				
		**20DILE** 010208				
		**11DDILE** 049824			–	
		**04DILE** 010256			With interlocked opposing contacts	
		**13DILE** 002397				
		**22DILE** 010288				
		**31DILE** 048912				
		**40DILE** 010304				
		**22DDILE** 049823			–	

	Actuating voltage U_s V AC	Circuit symbol	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**
Suppressor circuits							
Varistor suppressor							
	24 - 48 AC		DILE...	**VGDILE48** 010320		10 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E29096 UL CCN: NLDX CSA File No.: 012528 CSA Class No.: 3211-03 NA Certification: UL Listed, CSA certified
	110 - 250 AC			**VGDILE250** 010336			
	380 - 415 AC			**VGDILE415** 010463			
RC-Suppressor							
	24 - 48 AC		DILE...	**RCDILE48** 044264		10 off 10 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E29184 UL CCN: NKCR2 CSA File No.: - NA Certification: UL Recognized
	110 - 250 AC			**RCDILE250** 046320			

Notes For AC operated contactors 50 - 60 Hz.
DC operated contactor relays have an integrated suppressor.
Note drop-out delay.

	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**
Mechanical interlocks					
For mechanical connection of contactor and timing relays in combinations. 0 mm distance between contactors.					
	DILE… DILET…	**V0DILE** 026634		50 off	UL/CSA certification not required
Mechanical interlock					
For contactors with the same or different magnet system. 0 mm distance between contactors. Mechanical lifespan 2.5 x 10^6 operations. Additional auxiliary contact modules possible.					
 –	DILE…	**MVDILE** 010113		5 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E29184 UL CCN: NKCR2 CSA File No.: 012528 CSA Class No.: 3211-07 NA Certification: UL Recognized, CSA certified
Paralleling link					
For parallel connection of contacts					
 –	DILE… DILE…	**BT480**[2] 052785		100 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E29096 UL CCN: NLDX CSA File No.: 012528 CSA Class No.: 3211-07 NA Certification: UL Listed, CSA certified
Consisting of two four-pole paralleling links.					
 	DILEEM DILEM12 DILEM	**P1DILEM**[2] 019095		5 off	

Notes
[1] Not protected against accidental contact as specified in VDE 0106 Part 100.
[2] 4th pole can be broken off
4 pole: I_{th} = 60 A open
3 pole: I_{th} = 50 A open
AC-1 current carrying capacity of the open contactor increases by a factor of 2.5
Protected against accidental contact in accordance with VDE 0106 Part 100

	Contact sequence	For use with	**Part no.** Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**
Sealable shrouds						
Transparent Snap-fitting on contactor. Can be used with open installation or on service distribution board. Protection type: IP40 front Can be drilled to accommodate timing relay setting dials.						
		DILE… DILET…	**HDILE** 010482		1 off	UL/CSA certification not required
Start-point bridge						
		DILEEM DILEM12 DILEM	**S1DILEM**[1] 220218		20 off	
Reversing starter wiring kit						
Main current wiring for reversing combinations						
		DILEEM (+MVDILEM) DILEM12 (+MVDILEM) DILEM (+MVDILEM)	**MVS-WB-EM**[2] 220209		1 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E36332 UL CCN: NLRV7 CSA File No.: 012528 CSA Class No.: 3211-06 NA Certification: UL Listed, CSA certified
Star-delta wiring kit						
Main current wiring for star-delta combination incl. star-point bridge						
		DILE(E)M (+MVDILEM) DILE(E)M12 (+MVDILEM) DILE(E)M star contactor	**MVS-SB-EM**[3] 220213		1 off	Product Standards: IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking UL File No.: E36332 UL CCN: NLRV7 CSA File No.: 012528 CSA Class No.: 3211-06 NA Certification: UL Listed, CSA certified

Notes

[1] Protected against accidental contact in accordance with VDE 0106 Part 100

[2] The following control cables are integrated in addition to electrical interlock:
- Q11: A1 -Q12: 21
- Q11: 21 - Q12: A1
- Q11: A2 - Q12: A2

For use with overload relay separate mounting.

[3] The following control cables are integrated in addition to electrical interlock:
- Q13: A1 -Q15: 21
- Q13: 21 - Q15: A1
- Q13: A2 - Q15: A2

For use with overload relay separate mounting.

Contact		Rated operational current		Conventional thermal current	Distinctive number	Can be combined with auxiliary contact	Circuit symbol
N/O = normally open contact	NC = normally closed contact	AC-15		I_{th}			
		220 V 230 V 240 V	380 V 400 V 415 V	A			
		I_e	I_e				
		A	A				
Basic devices with positively driven contacts							
Screw terminals							
4 N/O	–	4	4	16	40E	DILA-XHI(V)…	
3 N/O	1 NC				31E	DILA-XHI(V)…	
2 N/O	2 NC				22E	DILA-XHI(V)…	
Spring-loaded terminals							
4 N/O	–	4	4	16	40E	DILA-XHIC(V)…	
3 N/O	1 NC				31E	DILA-XHIC(V)…	
2 N/O	2 NC				22E	DILA-XHIC(V)…	

Notes
Contact numbers to EN 50011
Coil terminal markings to EN 50005
The following applies to DC-operated contactors:
- Integrated suppressor circuit

Information relevant for export to North America

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	012528
CSA Class No.	3211-03
NA Certification	UL Listed, CSA certified

AC operation				DC operation			
Part no. Article no.	**Price** See price list	Std. pack	Circuit symbol	**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILA-40(230V50HZ) 276329		1 off		**DILA-40(24VDC)** 276344		1 off	**With screw terminals:**
DILA-31(230V50HZ) 276364				**DILA-31(24VDC)** 276379			
DILA-22(230V50HZ) 276399				**DILA-22(24VDC)** 276414			
DILAC-40(230V50HZ) 276441		1 off		**DILAC-40(24VDC)** 276456		1 off	**With spring-loaded terminals:**
DILAC-31(230V50HZ) 276473				**DILAC-31(24VDC)** 276488			
DILAC-22(230V50HZ) 276505				**DILAC-22(24VDC)** 276520			

Accessories **Page**
1 Suppressor → 5/54
2 Auxiliary contact modules → 5/38
Further actuating voltages → 5/72

		Contact N/O = normally open contact S_F = NO early-make NC = normally closed contact $Ö_S$ = NC late-break				Rated operational current AC-15 220 V 230 V 240 V I_e A	 380 V 400 V 415 V I_e A	Conventional thermal current I_{th} A	Circuit symbol	Distinctive number/type of combinations DILA(C)-40	 DILA(C)-31	 DILA(C)-22	**Part no.** Article no.	**Price** See price list	Std. pack	Description	**Notes**
DILA auxiliary contact modules																	
Screw terminals																	
	2 pole	–	–	2 NC	–	4	4	16		42E	33	24	**DILA-XHI02** 276420		5 off	With interlocked opposing contacts	Type E combinations comply with EN 50011 and must be given preference. The other combinations comply with EN 50005 The DC operated contactor DILA(C)-22 must only be combined with 2 pole auxiliary contacts.
		1 N/O	–	1 NC	–	4	4	16		51E	42	33	**DILA-XHI11** 276421				
		2 N/O	–	–	–	4	4	16		60E	51	42	**DILA-XHI20** 276422				
		–	1 S_F	–	1 $Ö_S$	4	4	16		51	42	33	**DILA-XHIV11** 276423			–	
	4 pole	–	–	4 NC	–	4	4	16		44E	35	26	**DILA-XHI04** 276424			With interlocked opposing contacts	
		1 N/O	–	3 NC	–	4	4	16		53E	44	35	**DILA-XHI13** 276425				
		2 N/O	–	2 NC	–	4	4	16		62E	53	44	**DILA-XHI22** 276426				
		3 N/O	–	1 NC	–	4	4	16		71E	62	53	**DILA-XHI31** 276427				
		4 N/O	–	–	–	4	4	16		80E	71	62	**DILA-XHI40** 276428				
		1 N/O	1 S_F	1 NC	1 $Ö_S$	4	4	16		62	53	44	**DILA-XHIV22** 276429			–	
Spring-loaded terminals																	
	2 pole	–	–	2 NC	–	4	4	16		42E	33	24	**DILA-XHIC02** 276526		5 off	With interlocked opposing contacts	Type E combinations comply with EN 50011 and must be given preference. The other combinations comply with EN 50005 The DC operated contactor DILA(C)-22 must only be combined with 2 pole auxiliary contacts.
		1 N/O	–	1 NC	–	4	4	16		51E	42	33	**DILA-XHIC11** 276527				
		2 N/O	–	–	–	4	4	16		60E	51	42	**DILA-XHIC20** 276528				
		–	1 S_F	–	1 $Ö_S$	4	4	16		51	42	33	**DILA-XHICV11** 276529			–	
	4 pole	–	–	4 NC	–	4	4	16		44E	35	26	**DILA-XHIC04** 276530			With interlocked opposing contacts	
		1 N/O	–	3 NC	–	4	4	16		53E	44	35	**DILA-XHIC13** 276531				
		2 N/O	–	2 NC	–	4	4	16		62E	53	44	**DILA-XHIC22** 276532				
		3 N/O	–	1 NC	–	4	4	16		71E	62	53	**DILA-XHIC31** 276533				
		4 N/O	–	–	–	4	4	16		80E	71	62	**DILA-XHIC40** 276534				
		1 N/O	1 S_F	1 NC	1 $Ö_S$	4	4	16		62	53	44	**DILA-XHICV22** 276535			–	

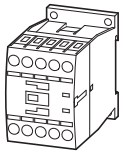
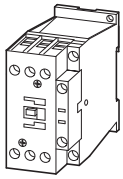
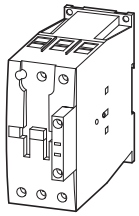
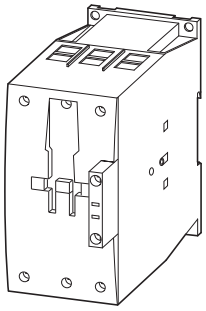
Information relevant for export to North America

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	012528
CSA Class No.	3211-03
NA Certification	UL Listed, CSA certified

DILM, DILE(E)M, DILMP

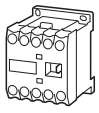
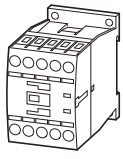
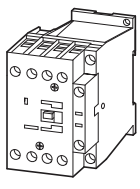
Technical overview

Contactors
3 pole

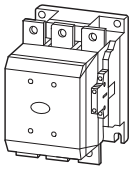
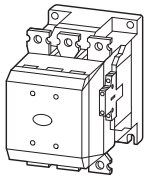
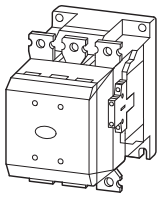
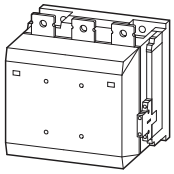
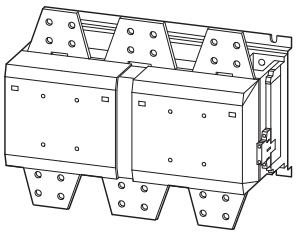
DIL		EEM	EM	EM12	M7	M9	M12	M15	M17	M25	M32	M38	M40	M50	M65	M80	M95	M115	M150	M170
Basic devices	Page	→ 5/4			→ 5/18				→ 5/18				→ 5/20			→ 5/50				
Complete units	Page		–		→ Page 5/24			–	→ Page 5/24				→ Page 5/26			→ Page 5/26				
Rated-operational voltage		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
AC-3 Rated operational power for 3-phase motors 50 – 60 Hz																				
220 V – 230 V		1.5	2.2	3	2.2	2.5	3.5	4	5	7.5	10	11	12.5	15.5	20	25	30	37	48	52
380 V – 400 V		**3**	**4**	**5.5**	**3**	**4**	**5.5**	**7.5**	**7.5**	**11**	**15**	**18.5**	**18.5**	**22**	**30**	**37**	**45**	**55**	**75**	**90**
440 V		3.3	4.6	5.5	4.5	5.5	7.5	8.4	10.5	15.5	20	21	25	32	41	51	60	75	95	105
500 V		3	4	5.5	3.5	4.5	7	7.5	12	17.5	23	24	28	36	47	58	70	85	110	120
660 V/690 V		3	4	4	3.5	4.5	6.5	7	11	14	17	21	23	30	35	63	75	90	96	140
1000 V		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
AC-4 Rated operational power for 3-phase motors 50 – 60 Hz		⚠ Increase in life span for DILM7 – DILM150 to 200000 operations																		
220 V – 230 V		1.1	1.5	1.5	1	1.5	2	2	2.5	3.5	4	4	5	6	7	12	16	17	20	20
380 V – 400 V		**2.2**	**3**	**3**	**2.2**	**2.5**	**3**	**3**	**4.5**	**6**	**7**	**7**	**9**	**10**	**12**	**20**	**26**	**28**	**33**	**33**
440 V		2.4	3.3	3.3	2.4	3	3.6	3.6	5.5	7	8	8	10	12	14	25	32	35	41	41
500 V		2.2	3	3	2.5	2.8	3.5	3.5	6	8	9	9	11	13	16	29	36	40	47	47
660 V/690 V		2.2	3	3	2.9	3.6	4.4	4.4	6.5	8.5	10	10	12	14	17	26	35	43	48	48
1000 V		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
AC-1 Rated operational power under resistive load, 40 °C																				
220 V – 230 V		8	8	8	8	8	8	8	15	17	17	17	22	30	37	42	49	61	72	85
380 V – 400 V		**13**	**13**	**13**	**14**	**14**	**14**	**14**	**26**	**29**	**29**	**29**	**39**	**53**	**65**	**72**	**85**	**105**	**125**	**150**
440 V		15	15	15	16	16	16	16	30	34	34	34	45	58	71	80	94	116	138	170
500 V		18	18	18	19	19	19	19	34	38	38	38	51	66	81	90	107	132	156	194
660 V/690 V		23	23	23	25	25	25	25	45	51	51	51	68	91	111	125	148	182	216	268
1000 V		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Conventional thermal Current $I_{th} = I_e$ open at 40 °C		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		22	22	22	22	22	22	22	40	45	45	45	60	80	98	110	130	160	190	225

Contactors
4 pole

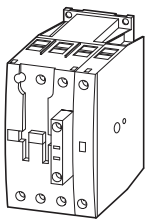
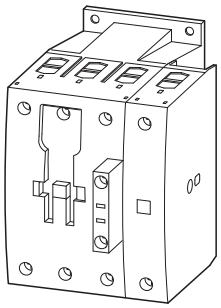
DIL		EM4	MP20	MP32
Rated operational voltage	Page	→ 5/4	→ Page 5/36	→ Page 5/36
AC-1				
Conventional free air thermal current $I_{th} = I_e$ open, at 40 °C		A	A	A
up to 690 V		22	22	32

Contactors
3 pole

M185A	M225A	M250	M300A	M400	M500	M580	M650	M750	M820	M1000	M1600	H1400	H2000	H2200	H2600
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
→ Page 5/32			→ Page 5/32			→ Page 5/32		→ Page 5/32			→ Page 5/34				
kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
55	70	75	90	125	155	185	205	240	260	315	500	–	–	–	–
90	**110**	**132**	**160**	**200**	**250**	**315**	**355**	**400**	**450**	**560**	**900**	–	–	–	–
115	142	157	190	255	345	370	420	480	525	650	1000	–	–	–	–
132	160	180	215	290	360	420	470	550	600	730	1180	–	–	–	–
175	215	240	286	344	344	560	630	720	750	1000	1600	–	–	–	–
108	108	108	132	132	132	600	600	800	800	1000	1770	–	–	–	–
41	51	62	75	92	112	143	161	181	209	260	430	–	–	–	–
75	**90**	**110**	**132**	**160**	**200**	**250**	**280**	**315**	**355**	**450**	**750**	–	–	–	–
85	102	125	140	186	229	290	326	367	418	520	830	–	–	–	–
96	116	143	172	214	260	330	370	417	474	590	940	–	–	–	–
127	155	189	229	283	344	440	494	556	633	780	1300	–	–	–	–
108	108	108	132	132	132	509	509	678	678	1000	1650	–	–	–	–
121	139	155	177	221	310	354	376	398	443	443	717	620	886	1075	1269
210	**241**	**268**	**306**	**382**	**535**	**612**	**650**	**689**	**766**	**766**	**1247**	**1071**	**1531**	**1870**	**2207**
243	279	310	354	443	620	709	753	797	886	886	1371	1240	1773	2058	2427
277	317	352	403	503	705	806	856	906	1007	1007	1558	1410	2015	2338	2758
365	419	465	532	664	930	1064	1130	1196	1330	1330	2151	1861	2660	3227	3806
554	635	705	806	1007	1410	1612	1712	1813	2015	2015	2420	2417	3223	4676	5516
A	A	A	A	A	A	A	A	A	A	A	A	A	A		
337	356	400	430	612	857	980	1041	1102	1225	1225	2200	1714	2450	2700	3185

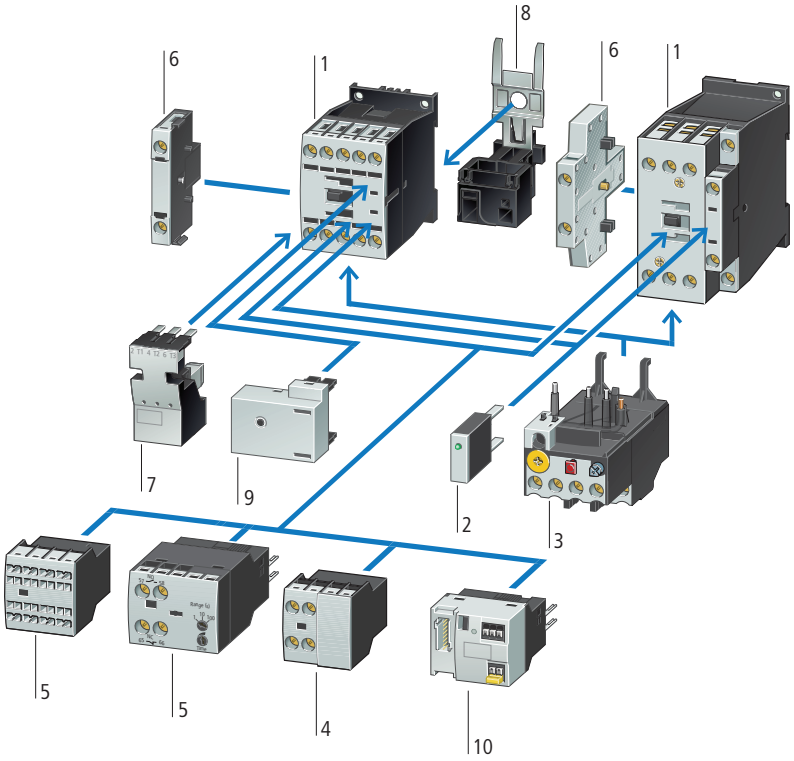
Contactors
4 pole

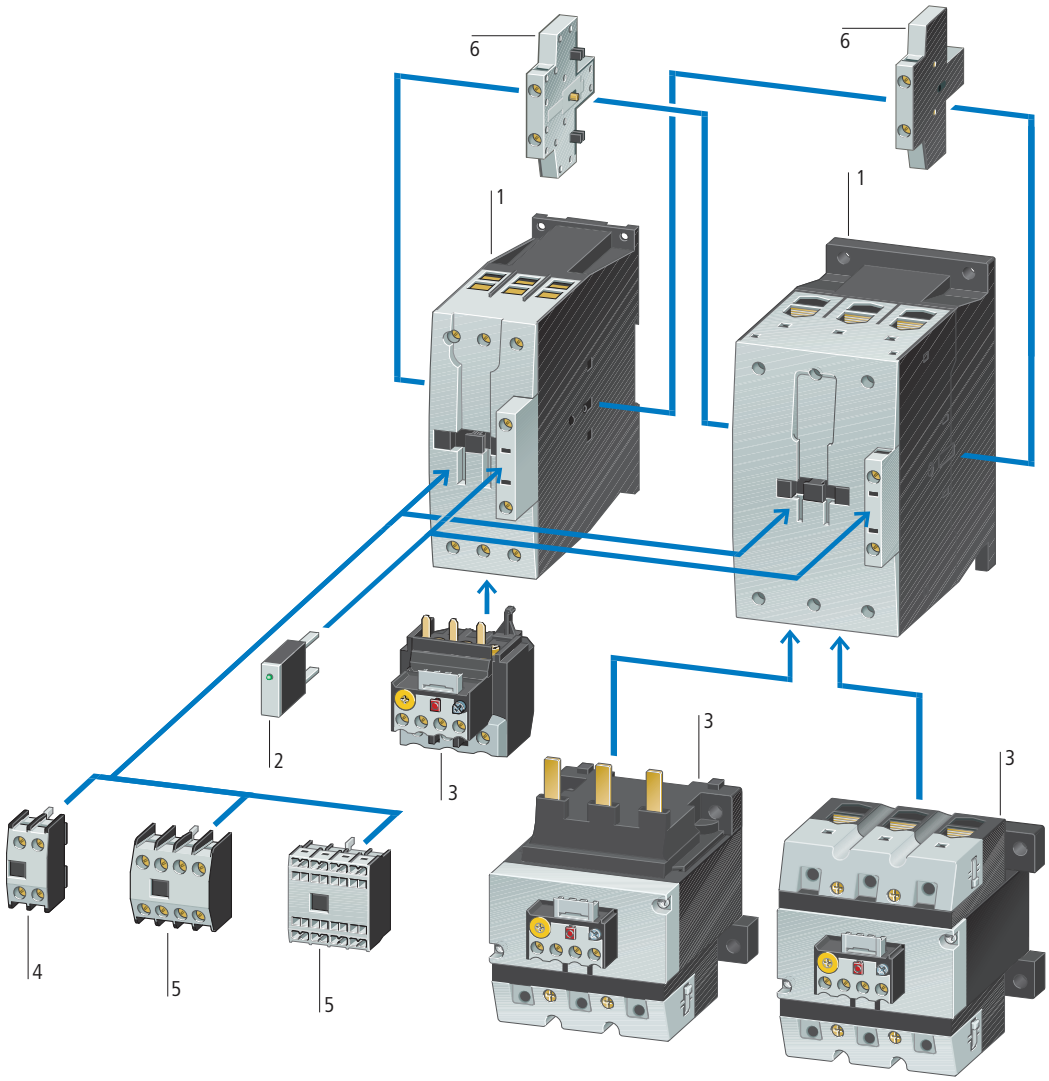



MP45	MP63	MP80	MP125	MP160	MP200
→ Page 5/36	→ Page 5/36		→ Page 5/36		
A	A	A	A	A	A
45	63	80	125	160	200

DILM7...DILM170

System overview





Contactors up to 90 kW (AC-3/400 V) 1

3 pole
→ Page 5/18

4 pole
→ Page 5/36

Suppressor circuits 2
→ Page 5/54

Overload relays 3
→ Page 6/8

Auxiliary contact modules 4
→ Page 5/38

Auxiliary contact modules 5
→ Page 5/38

Auxiliary contact modules 6
→ Page 5/41

Motor feeder plug 7
→ Page 5/62

PE module with contact plate 8
→ Page 5/62

Motor suppressor module
→ Page 5/63

SmartWire-Darwin contactor module 10
→ Page 5/62