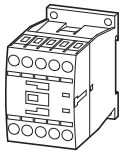
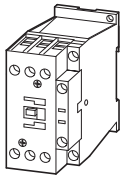
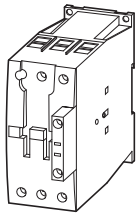
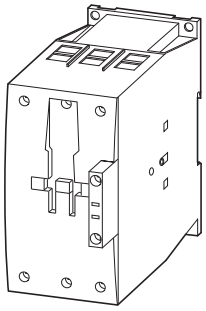
DILM, DILE(E)M, DILMP

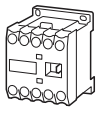
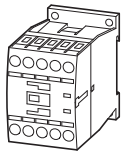
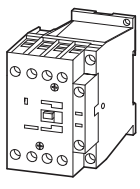
Technical overview

Contactors
3 pole

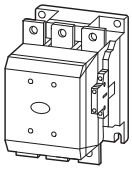
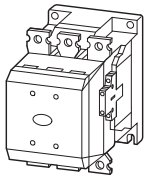
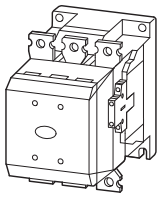
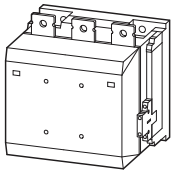
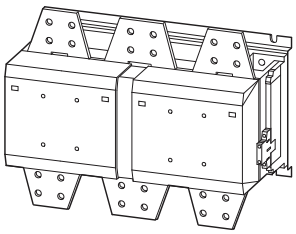
DIL		EEM	EM	EM12	M7	M9	M12	M15	M17	M25	M32	M38	M40	M50	M65	M80	M95	M115	M150	M170
Basic devices	Page	→ 5/4			→ 5/18				→ 5/18				→ 5/20			→ 5/50				
Complete units	Page		–		→ Page 5/24			–	→ Page 5/24				→ Page 5/26			→ Page 5/26				
Rated-operational voltage		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	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

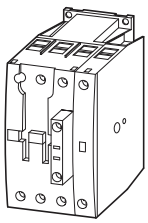
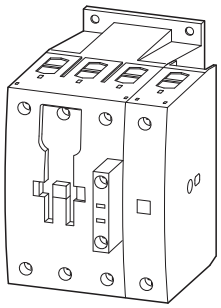
DIL		EM4	MP20	MP32
Rated operational voltage	Page	→ 5/4	→ Page 5/36	→ Page 5/36
AC-1				
Conventional free air thermal current $I_{th} = I_e$ open, at 40 °C		A	A	A
up to 690 V		22	22	32

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

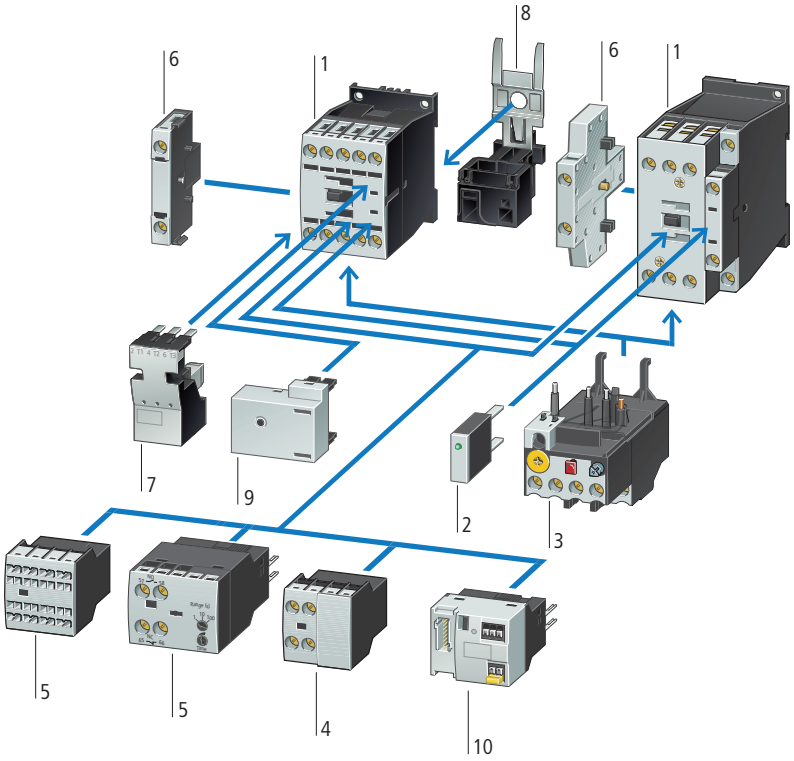
Contactors
4 pole

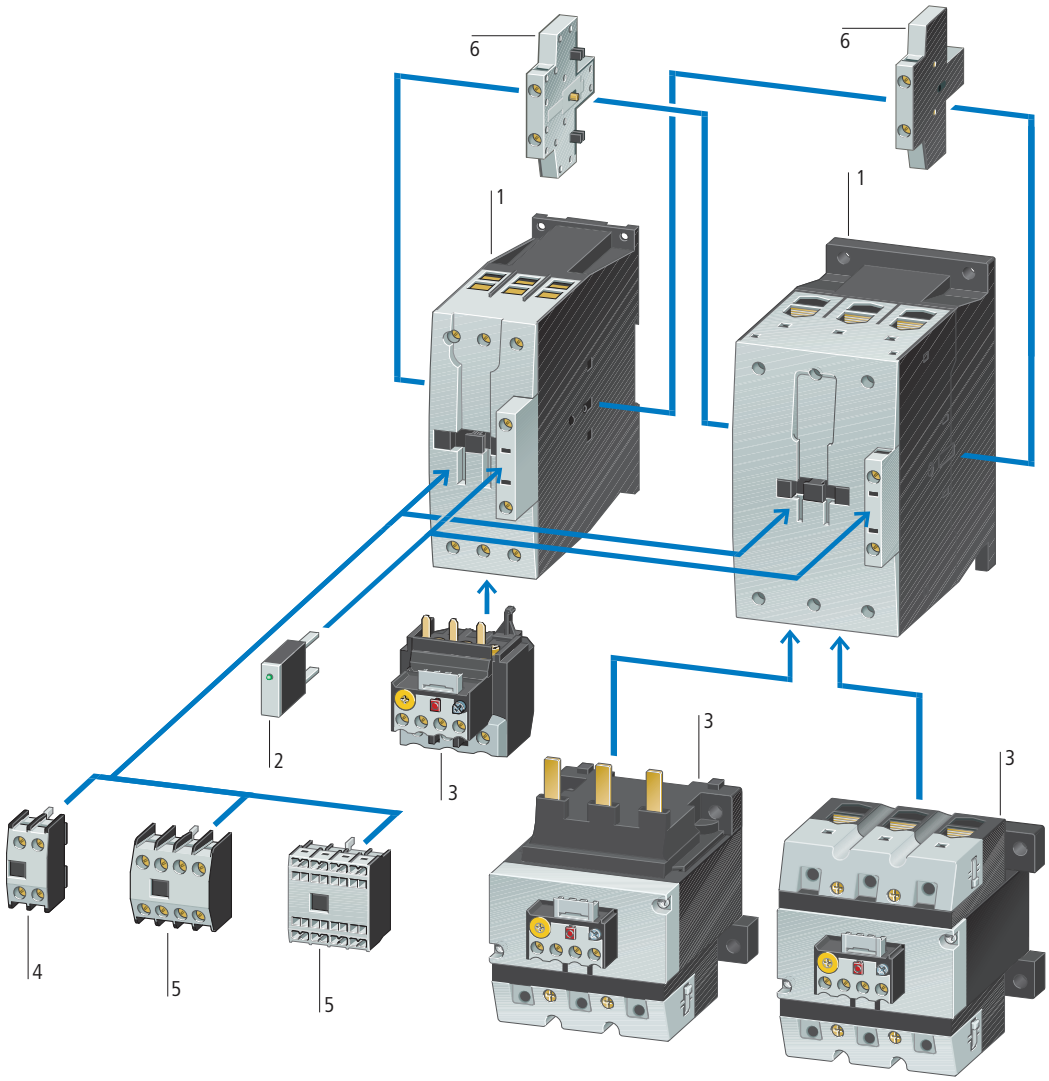



MP45	MP63	MP80	MP125	MP160	MP200
→ Page 5/36	→ Page 5/36		→ Page 5/36		
A	A	A	A	A	A
45	63	80	125	160	200

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

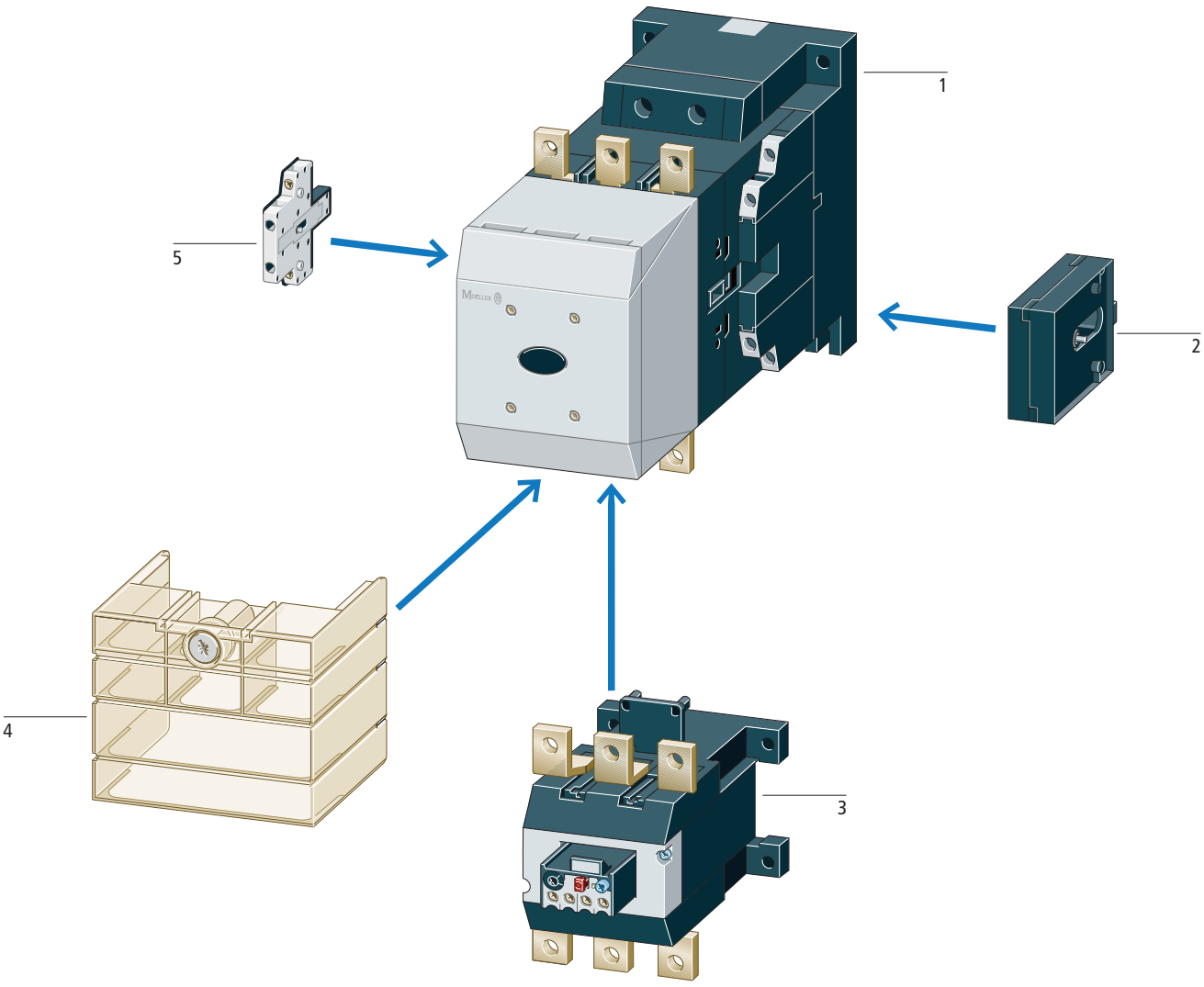
Motor feeder plug 7
→ Page 5/62

PE module with contact plate 8
→ Page 5/62

Motor suppressor module
→ Page 5/63

SmartWire-Darwin contactor module 10
→ Page 5/62

DILM185... DILH2600



Contactors 90 – 900 kW (AC-3/400 V) Comfort series 1

→ Page 5/32

Standard range 90 – 250 kW 1

→ Page 5/30

Mechanical interlock 2

→ Page 5/56

Overload relays 3

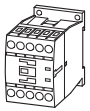
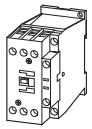
→ Page 6/12

Terminal shroud 4

→ Page 5/65

Auxiliary contact modules 5

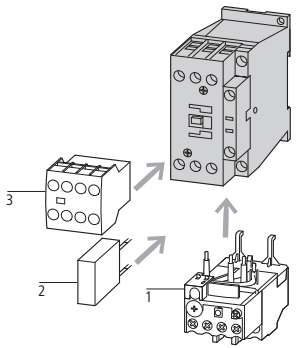
→ Page 5/41

Rated operational current	Max. motor rating for three-phase motors 50 - 60 Hz						Conventional thermal current $I_{th} = I_e$ AC-1 at 60 °C	Contact configuration		Circuit symbol
AC-3	AC-3			AC-4				N/O = normally open contact NC = normally closed contact		
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			
I_e **A**	P kW	**P** **kW**	P kW	P kW	**P** **kW**	P kW	$I_{th} = I_e$ A			
Basic device										
Screw terminals										
3 pole										
	**7**	2.2	**3**	3.5	1	**2.2**	2.9	20	1 N/O	–	
	7	2.2	**3**	3.5	1	**2.2**	2.9	20	–	1 NC	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	1 N/O	–	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	–	1 NC	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	1 N/O	–	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	–	1 NC	
	15.5	4	**7.5**	7	2	**3**	4.4	20	1 N/O	–	
	15.5	4	**7.5**	7	2	**3**	4.4	20	–	1 NC	
	**18**	5	**7.5**	11	2.5	**4.5**	6.5	35	1 N/O	–	
	18	5	**7.5**	11	2.5	**4.5**	6.5	35	–	1 NC	
	25	7.5	**11**	14	3.5	**6**	8.5	40	1 N/O	–	
	25	7.5	**11**	14	3.5	**6**	8.5	40	–	1 NC	
	32	10	**15**	17	4	**7**	10	40	1 N/O	–	
	32	10	**15**	17	4	**7**	10	40	–	1 NC	
	38	11	**18.5**	21	4	**7**	10	40	1 N/O	–	
	38	11	**18.5**	21	4	**7**	10	40	–	1 NC	

Information relevant for export to North America

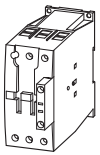
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL CCN	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
NA Certification	UL Listed, CSA certified
See also	→ Page 5/84

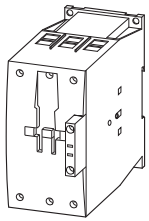
Can be combined with auxiliary contact	AC operation **Part no.** Article no.	**Price** See price list	DC operation **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILM32-XHI.. DILA-XHI(V)..	**DILM7-10(230V50HZ)** 276550		**DILM7-10(24VDC)** 276565		1 off	Contacts to EN 50 012. For all DC operated contactors DILM7 - DILM15 the following applies: • Integrated varistor-suppressor circuit. For DC operated contactors DILM17 - DILM170 the following applies: • Integrated suppressor circuit in actuating electronics For AC operated contactors DILM115 - DILM170 the following applies: • Integrated suppressor circuit in actuating electronics For DILM7-01 – DILM38-01 the following applies: • With mirror contact. 1) Electrical lifespan → 5/91
DILA-XHI(V)..	**DILM7-01(230V50HZ)** 276585		**DILM7-01(24VDC)** 276600			
DILM32-XHI.. DILA-XHI(V)..	**DILM9-10(230V50HZ)** 276690		**DILM9-10(24VDC)** 276705			
DILA-XHI(V)..	**DILM9-01(230V50HZ)** 276725		**DILM9-01(24VDC)** 276740			
DILM32-XHI.. DILA-XHI(V)..	**DILM12-10(230V50HZ)** 276830		**DILM12-10(24VDC)** 276845			
DILA-XHI(V)..	**DILM12-01(230V50HZ)** 276865		**DILM12-01(24VDC)** 276880			
DILM32-XHI.. DILA-XHI(V)..	**DILM15-10(230V50HZ)**[1] 290058		**DILM15-10(24VDC)**[1] 290073			
DILA-XHI(V)..	**DILM15-01(230V50HZ)**[1] 290093		**DILM15-01(24VDC)**[1] 290108			
DILM32-XHI.. DILA-XHI(V).. DILM32-XHI11-S	**DILM17-10(230V50HZ)** 277004		**DILM17-10(RDC24)** 277018			
DILA-XHI(V).. DILM32-XHI11-S	**DILM17-01(230V50HZ)** 277036		**DILM17-01(RDC24)** 277050			
DILM32-XHI.. DILA-XHI(V).. DILM32-XHI11-S	**DILM25-10(230V50HZ)** 277132		**DILM25-10(RDC24)** 277146			
DILA-XHI(V).. DILM32-XHI11-S	**DILM25-01(230V50HZ)** 277164		**DILM25-01(RDC24)** 277178			
DILM32-XHI.. DILA-XHI(V).. DILM32-XHI11-S	**DILM32-10(230V50HZ)** 277260		**DILM32-10(RDC24)** 277274			
DILA-XHI(V).. DILM32-XHI11-S	**DILM32-01(230V50HZ)** 277292		**DILM32-01(RDC24)** 277306			
DILM32-XHI.. DILA-XHI(V).. DILM32-XHI11-S	**DILM38-10(230V50HZ)**[1] 112428		**DILM38-10(RDC24)**[1] 112442			
DILA-XHI(V).. DILM32-XHI11-S	**DILM38-01(230V50HZ)**[1] 112456		**DILM38-01(RDC24)**[1] 112470			



Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/54
3 Auxiliary contact module	→ 5/38
Further actuating voltages	→ 5/73
Accessories	→ 5/56

Rated operational current	Max. motor rating for three-phase motors 50 - 60 Hz							Conventional thermal current $I_{th} = I_e$ AC-1 at 60 °C	Contact configuration	Circuit symbol
AC-3	AC-3			AC-4					N/O = normally open contact NC = normally closed contact	
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			
I_e	P	**P**	P	P	**P**	P	$I_{th} = I_e$			
A	kW	**kW**	kW	kW	**kW**	kW	A			
Basic device										
Screw terminals										
3 pole										
40	12.5	**18.5**	23	5	**9**	12	50	–	–	
50	15.5	**22**	30	6	**10**	14	65	–	–	
65	20	**30**	35	7	**12**	17	80	–	–	
72	25	**37**	35	7	**12**	17	80	–	–	
80	25	**37**	63	12	**20**	26	90	–	–	
95	30	**45**	75	16	**26**	35	110	–	–	
115	37	**55**	90	17	**28**	43	130	–	–	
150	48	**75**	96	20	**33**	48	160	–	–	
170	52	**90**	140	20	**33**	48	185	–	–	

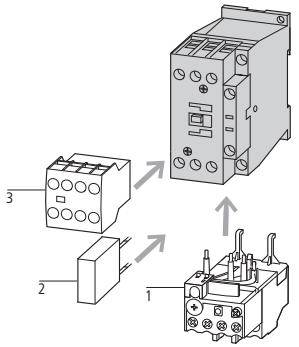




Information relevant for export to North America

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, CSA certified
See also	→ Page 5/84

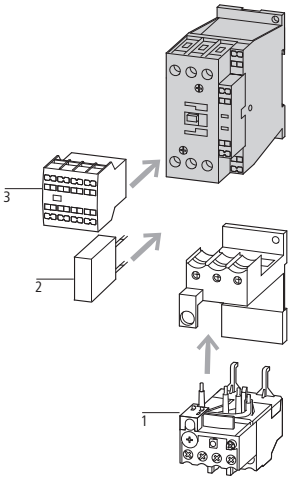
Can be combined with auxiliary contact	AC operation **Part no.** Article no.	**Price** See price list	DC operation **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM40(230V50HZ)** 277766		**DILM40(RDC24)** 277780		1 off	Contacts to EN 50012. For all DC operated contactors DILM7 - DILM15 the following applies: • Integrated varistor-suppressor circuit. For DC operated contactors DILM17 - DILM170 the following applies: • Integrated suppressor circuit in actuating electronics For AC operated contactors DILM115 - DILM170 the following applies: • Integrated suppressor circuit in actuating electronics For DILM7-01 – DILM38-01 the following applies: • With mirror contact. [1] Electrical lifespan → 5/91
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM50(230V50HZ)** 277830		**DILM50(RDC24)** 277844			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM65(230V50HZ** 277894		**DILM65(RDC24)** 277908			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM72(230V50HZ)**[1] 107670		**DILM72(RDC24)**[1] 107671			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM80(230V50HZ)** 239402		**DILM80(RDC24)** 239416			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM95(230V50HZ)** 239480		**DILM95(RDC24)** 239510			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM115(RAC240)** 239548		**DILM115(RDC24)** 239555			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM150(RAC240)** 239588		**DILM150(RDC24)** 239591			
DILM150-XHI(V).. DILM1000-XHI(V)..	**DILM170(RAC240)**[1] 107013		**DILM170(RDC24)**[1] 107016			



Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/54
3 Auxiliary contact module	→ 5/38
Further actuating voltages	→ 5/75
Accessories	→ 5/56

Rated operational current AC-3	Max. motor rating for three-phase motors 50 - 60 Hz AC-3			AC-4			Conventional thermal current $I\ I_{th} = I_e$ AC-1 at 60 °C	Contact configuration N/O = normally open contact NC = normally closed contact		Circuit symbol
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			
I_e	P	P	P	P	P	P	$I_{th} = I_e$			
A	kW	**kW**	kW	kW	**kW**	kW	A			
Basic device										
Spring-loaded terminals 3 pole										
7	2.2	**3**	3.5	1	**2.2**	2.9	20	1 N/O	–	
7	2.2	**3**	3.5	1	**2.2**	2.9	20	–	1 NC	
9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	1 N/O	–	
9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	–	1 NC	
12	3.5	**5.5**	6.5	2	**3**	4.4	20	1 N/O	–	
12	3.5	**5.5**	6.5	2	**3**	4.4	20	–	1 NC	
15.5	4	**7.5**	7	2	**3**	4.4	20	1 N/O	–	
15.5	4	**7.5**	7	2	**3**	4.4	20	–	1 NC	
Spring-loaded terminals on auxiliary and control circuit terminals 3 pole										
18	5	**7.5**	11	2.5	**4.5**	6.5	35	1 N/O	–	
18	5	**7.5**	11	2.5	**4.5**	6.5	35	–	1 NC	
25	7.5	**11**	14	3.5	**6**	8.5	40	1 N/O	–	
25	7.5	**11**	14	3.5	**6**	8.5	40	–	1 NC	
32	10	**15**	17	4	**7**	10	40	1 N/O	–	
32	10	**15**	17	4	**7**	10	40	–	1 NC	
40	12.5	**18.5**	23	5	**9**	12	50	–	–	
50	15.5	**22**	30	6	**10**	14	65	–	–	
65	20	**30**	35	7	**12**	17	80	–	–	
80	25	**37**	63	12	**20**	26	90	–	–	
95	30	**45**	75	16	**26**	35	110	–	–	
115	37	**55**	90	17	**28**	43	130	–	–	
150	48	**75**	96	20	**33**	48	160	–	–	

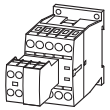
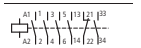
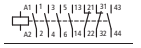
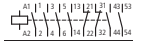
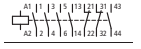
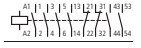
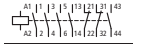
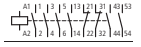
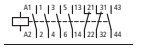
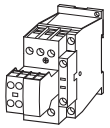
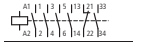
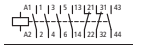
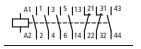
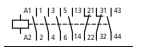
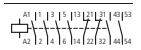
Can be combined with auxiliary contact	**AC operation** Part no. Article no.	Price See price list	**DC operation** Part no. Article no.	Price See price list	Std. pack	**Notes**
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC7-10(230V50HZ)** 277389		**DILMC7-10(24VDC)** 277404		1 off	Contacts to EN 50 012. For DILMC7 – DILMC15 the following applies: • Auxiliary coil, and main current terminals with spring-loaded terminals. For DILMC17 – DILMC150 the following applies: • Auxiliary connections, coil connections with spring-loaded connection terminals. • Main current connections with screw terminals. For DC operated contactors DILMC7 - DILMC15 the following applies: • Integrated varistor-suppressor circuit. For DC operated contactors DILMC17 - DILMC150 the following applies: • Integrated suppressor circuit in actuating electronics For AC operated contactors DILMC115 - DILMC150 the following applies: • Integrated suppressor circuit in actuating electronics For DILMC7-01 – DILMC32-01 the following applies: • With mirror contact.
DILA-XHIC(V)..	**DILMC7-01(230V50HZ)** 277421		**DILMC7-01(24VDC)** 277436			
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC9-10(230V50HZ)** 277453		**DILMC9-10(24VDC)** 277468			
DILA-XHIC(V)..	**DILMC9-01(230V50HZ)** 277485		**DILMC9-01(24VDC)** 277500			
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC12-10(230V50HZ)** 277517		**DILMC12-10(24VDC)** 277532			
DILA-XHIC(V)..	**DILMC12-01(230V50HZ)** 277549		**DILMC12-01(24VDC)** 277564			
DILM32-XHIC… DILA-XHIC(V)…	**DILMC15-10(230V50HZ)** 293911		**DILMC15-10(24VDC)** 293926			
DILA-XHIC(V)…	**DILMC15-01(230V50HZ)** 293946		**DILMC15-01(24VDC)** 293961			
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC17-10(230V50HZ)** 277581		**DILMC17-10(RDC24)** 277595		1 off	
DILA-XHIC(V)..	**DILMC17-01(230V50HZ** 277611		**DILMC17-01(RDC24)** 277625			
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC25-10(230V50HZ)** 277641		**DILMC25-10(RDC24)** 277655			
DILA-XHIC(V)..	**DILMC25-01(230V50HZ)** 277671		**DILMC25-01(RDC24)** 277685			
DILM32-XHIC.. DILA-XHIC(V)..	**DILMC32-10(230V50HZ)** 277701		**DILMC32-10(RDC24)** 277715			
DILA-XHIC(V)..	**DILMC32-01(230V50HZ)** 277731		**DILMC32-01(RDC24)** 277745			
DILM150-XHIC(V).. DILM1000-XHIC..	**DILMC40(230V50HZ)** 277965		**DILMC40(RDC24)** 277979			
	DILMC50(230V50HZ) 277995		**DILMC50(RDC24)** 278009			
	DILMC65(230V50HZ) 278025		**DILMC65(RDC24)** 278039			
	DILMC80(230V50HZ) 239618		**DILMC80(RDC24)** 239652			
	DILMC95(230V50HZ) 239685		**DILMC95(RDC24)** 239715			
	DILMC115(RAC240) 239736		**DILMC115(RDC24)** 239741			
	DILMC150(RAC240) 239751		**DILMC150(RDC24)** 239765			



Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/54
3 Auxiliary contact module	→ 5/38
Further actuating voltages	→ 5/77
Accessories	→ 5/56

Information relevant for export to North America

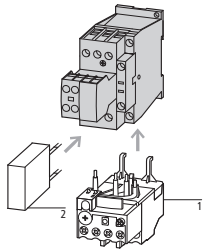
Product Standards	IEC/EN 60947-4-1; UL 5080; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL CCN	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
NA Certification	UL Listed, CSA certified
See also	→ Page 5/84

	Rated operational current AC-3	Max. motor rating for three-phase motors 50 - 60 Hz AC-3			AC-4			Conventional free air thermal current $I_{th} = I_e$ AC-1 at 60 °C	Contact		Circuit symbol
	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	Contact configuration: ⊖ = Safety function by positive opening according to IEC/EN 60947-5-1		
	I_e	P	**P**	P	P	**P**	P	$I_{th} = I_e$	N/O = normally open contact	NC = normally closed contact	
	A	kW	**kW**	kW	kW	**kW**	kW	A			
DILM complete device											
Screw terminals											
	**7**	2.2	**3**	3.5	1	**2.2**	2.9	20	2 N/O	1 NC	
	7	2.2	**3**	3.5	1	**2.2**	2.9	20	1 NC		
	7	2.2	**3**	3.5	1	**2.2**	2.9	20	3 N/O	2 NC	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	2 N/O	1 NC	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	1 NC		
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	3 N/O	2 NC	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	2 N/O	1 NC	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	1 NC		
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	3 N/O	2 NC	
	15.5	4	**7.5**	7	2	**3**	4.4	20	2 N/O	2 NC	
	**18**	5	**7.5**	11	2.5	**4.5**	6.5	35	2 N/O	1 NC	
	18	5	**7.5**	11	2.5	**4.5**	6.5	35	1 NC		
	18	5	**7.5**	11	2.5	**4.5**	6.5	35	3 N/O	2 NC	
	25	7.5	**11**	14	3.5	**6**	8.5	40	2 N/O	1 NC	
	25	7.5	**11**	14	3.5	**6**	8.5	40	1 NC		
	25	7.5	**11**	14	3.5	**6**	8.5	40	3 N/O	2 NC	
	32	10	**15**	17	4	**7**	10	40	2 N/O	1 NC	
	32	10	**15**	17	4	**7**	10	40	1 NC		
	32	10	**15**	17	4	**7**	10	40	3 N/O	2 NC	

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, CSA certified
See also	→ Page 5/84

AC operation **Part no.** Article no.	**Price** See price list	**DC operation** **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
DILM7-21(230V50HZ) 276620		**DILM7-21(24VDC)** 276635		1 off	
DILM7-22(230V50HZ) 106360		**DILM7-22(24VDC)** 106367			
DILM7-32(230V50HZ) 276655		**DILM7-32(24VDC)** 276670			
DILM9-21(230V50HZ) 276760		**DILM9-21(24VDC)** 276775			
DILM9-22(230V50HZ) 106361		**DILM9-22(24VDC)** 106368			
DILM9-32(230V50HZ) 276795		**DILM9-32(24VDC)** 276810			
DILM12-21(230V50HZ) 276900		**DILM12-21(24VDC)** 276915			
DILM12-22(230V50HZ) 106362		**DILM12-22(24VDC)** 106369			
DILM12-32(230V50HZ) 276935		**DILM12-32(24VDC)** 276950			
DILM15-22(230V50HZ) 106363		**DILM15-22(24VDC)** 106370			
DILM17-21(230V50HZ) 277068		**DILM17-21(RDC24)** 277082			
DILM17-22(230V50HZ) 106364		**DILM17-22(RDC24)** 106371			
DILM17-32(230V50HZ) 277100		**DILM17-32(RDC24)** 277114			
DILM25-21(230V50HZ) 277196		**DILM25-21(RDC24)** 277210			
DILM25-22(230V50HZ) 106365		**DILM25-22(RDC24)** 106372			
DILM25-32(230V50HZ) 277228		**DILM25-32(RDC24)** 277242			
DILM32-21(230V50HZ) 277324		**DILM32-21(RDC24)** 277338			
DILM32-22(230V50HZ) 106366		**DILM32-22(RDC24)** 106373			
DILM32-32(230V50HZ) 277356		**DILM32-32(RDC24)** 277370			



Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/54
Accessories	→ 5/56

For all DC operated contactors DILM7 - DILM15 the following applies:
- Integrated varistor suppressor circuit.

For DC operated contactors DILM17 - DILM170 the following applies:
- Integrated suppressor circuit in actuating electronics

For AC operated contactors DILM115 - DILM170 the following applies:
- Integrated suppressor circuit in actuating electronics

For DILM7 - DILM150 the following applies:
- With mirror contact.

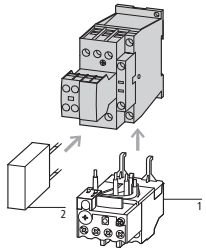
Contacts to EN 50012

Rated operational current AC-3	Max. motor rating for three-phase motors 50 - 60 Hz AC-3			AC-4			Conventional free air thermal current $I_{th} = I_e$ AC-1 at 60 °C	Contact		Circuit symbol
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	Contact configuration: ⊖ = Safety function by positive opening according to IEC/EN 60947-5-1		
I_e	P	**P**	P	P	**P**	P	$I_{th} = I_e$	N/O = normally open contact	NC = normally closed contact	
A	kW	**kW**	kW	kW	**kW**	kW	A			
DILM complete device										
Screw terminals										
40	12.5	**18.5**	23	5	**9**	12	50	2 N/O	2 NC	
50	15.5	**22**	30	6	**10**	14	65	2 N/O	2 NC	
65	20	**30**	35	7	**12**	17	80	2 N/O	2 NC	
80	25	**37**	63	12	**20**	26	90	2 N/O	2 NC	
95	30	**45**	75	16	**26**	35	110	2 N/O	2 NC	
115	37	**55**	90	17	**28**	43	130	2 N/O	2 NC	
150	48	**75**	96	20	**34**	48	160	2 N/O	2 NC	

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, CSA certified
See also	→ Page 5/84

AC operation Part no. Article no.	Price See price list	DC operation Part no. Article no.	Price See price list	Std. pack	Notes
DILM40-22(230V50HZ) 277798		**DILM40-22(RDC24)** 277812		1 off	
DILM50-22(230V50HZ) 277862		**DILM50-22(RDC24)** 277876			
DILM65-22(230V50HZ) 277926		**DILM65-22(RDC24)** 277940			
DILM80-22(230V50HZ) 239449		**DILM80-22(RDC24)** 239463			
DILM95-22(230V50HZ) 239527		**DILM95-22(RDC24)** 239541			
DILM115-22(RAC240) 239578		**DILM115-22(RDC24)** 239581			
DILM150-22(RAC240) 239598		**DILM150-22(RDC24)** 239601			



Accessories	Page
1 Overload relay	→ Chapter 6
2 Suppressor	→ 5/54
Accessories	→ 5/56

For DC operated contactors DILM17 - DILM170 the following applies:
- Integrated suppressor circuit in actuating electronics

For AC operated contactors DILM115 - DILM170 the following applies:
- Integrated suppressor circuit in actuating electronics

For DILM7 - DILM150 the following applies:
- With mirror contact.

Contacts to EN 50012

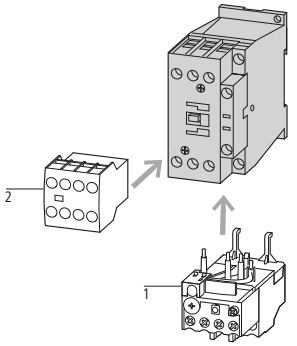
Pole	Rated operational current AC-3	Max. motor rating, three-phase motors, 50 - 60 Hz AC-3			AC-4			Conventional thermal current $I_{th} = I_e$ AC-1 at 60 °C	Contact		Circuit symbol
	380 V 400 V	220 V 230 V	**380 V 400 V**	660 V 690 V	220 V 230 V	**380 V 400 V**	660 V 690 V	Open	Contact configuration: ⊖ = Safety function by positive opening according to IEC/EN 60947-5-1		
	I_e	P	**P**	P	P	**P**	P	$I_{th} = I_e$	N/O = normally open contact	NC = normally closed contact	
	A	kW	**kW**	kW	kW	**kW**	kW	A			
Basic device											
Screw terminals											
3 pole	**7**	2.2	**3**	3.5	1	**2.2**	2.9	20	1 N/O	–	
	7	2.2	**3**	3.5	1	**2.2**	2.9	20	–	1 NC	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	1 N/O	–	
	9	2.5	**4**	4.5	1.5	**2.5**	3.6	20	–	1 NC	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	1 N/O	–	
	12	3.5	**5.5**	6.5	2	**3**	4.4	20	–	1 NC	
	18	5	**7.5**	11	2.5	**4.5**	6.5	35	1 N/O	–	
	18	5	**7.5**	11	2.5	**4.5**	6.5	35	–	1 NC	
	25	7.5	**11**	14	3.5	**6**	8.5	40	–	1 NC	
	25	7.5	**11**	14	3.5	**6**	8.5	40	1 N/O	–	
	32	10	**15**	17	4	**7**	10	40	1 N/O	–	
	32	10	**15**	17	4	**7**	10	40	–	1 NC	
3 pole	**40**	12.5	**18.5**	23	5	**9**	12	50	–	–	
	50	15.5	**22**	30	6	**10**	14	65	–	–	
	65	20	**30**	35	7	**12**	17	80	–	–	
3 pole	**80**	25	**37**	63	12	**20**	26	90	–	–	
	95	30	**45**	75	16	**26**	35	110	–	–	
	115	37	**55**	90	17	**28**	43	130	–	–	
	150	48	**75**	96	20	**33**	48	160	–	–	

[2] **Information relevant for export to North America**

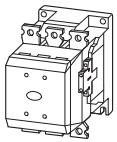
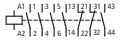
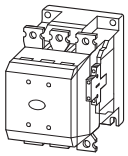
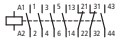
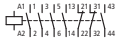
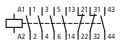
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29096
UL CCN	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
NA Certification	UL Listed, CSA certified
See also	→ Page 5/84

AC operation

Part no. Article no.	**Price** See price list	Std. pack	**Notes**
DILMF8-10(RAC240) 104413		1 off	Contactors suitable for semi-conductor industry according to SEMI F47. Contactors hum-free, suitable for building services automation. Operating mechanism adjustable from 50 Hz to 400 Hz. For all contactors the following applies: • Integrated suppressor circuit For DILMF8-01 – DILMF32-01 the following applies: • With mirror contact. Contacts to EN 50 012.
DILMF8-01(RAC240) 104417			
DILMF11-10(RAC240) 104421			
DILMF11-01(RAC240) 104425			
DILMF14-10(RAC240) 104429			
DILMF14-01(RAC240) 104433			
DILMF17-10(RAC240) 104437			
DILMF17-01(RAC240) 104441			
DILMF25-01(RAC240) 104449			
DILMF25-10(RAC240) 104445			
DILMF32-10(RAC240) 104453			
DILMF32-01(RAC240) 104457			
DILMF40(RAC240) 104461			
DILMF50(RAC240) 104465			
DILMF65(RAC240) 104469			
DILMF80(RAC240) 104473			
DILMF95(RAC240) 104477			
DILMF115(RAC240) 104481			
DILMF150(RAC240) 104485			



Accessories	**Page**
1 Overload relay	→ Chapter 6
2 Auxiliary contact modules	→ 5/38
Further actuating voltages	→ 5/80
Accessories	→ 5/56

	Rated operational current	Max. motor rating for three-phase motors 50 - 60 Hz						Conventional thermal current $I_{th} = I_e$ AC-1 at 40 °C	Circuit symbol	For use with
	AC-3	AC-3			AC-4			Open		
	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	$I_{th} = I_e$		
	I_e	P	**P**	P	P	**P**	P	A		
	A	kW	**kW**	kW	kW	**kW**	kW			
Standard device for currents greater than 150 A										
DILM complete device										
	**250**	75	**132**	240	62	**110**	189	400		DILM820-XHI...
	300	90	**160**	195	75	**132**	160	430		DILM820-XHI...
	**400**	125	**200**	344	92	**160**	283	612		DILM820-XHI...
	500	155	**250**	344	112	**200**	344	857		DILM820-XHI...
	580	185	**315**	344	112	**200**	344	920		DILM820-XHI...

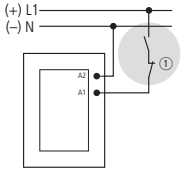
Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**	
DILM250-S/22(220-240V50/60HZ) 274190		1 off	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking E29096 NLDX 1017510 3211-04 UL Listed, CSA certified
DILM300A-S/22(220-240V50/60HZ)[1] 139559		1 off	Request filed for UL and CSA	
DILM400-S/22(220-240V50/60HZ) 274196		1 off	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification See also	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking E29096 NLDX 012528 3211-04 UL Listed, CSA certified Additional approvals, → Page 5/86
DILM500-S/22(220-240V50/60HZ) 274199				
DILM570-S/22(220-240V50/60HZ) 110744				

Notes

[1] Availability from August 2010.
Previous DILM300/22, see Online Catalog at http://ecat.moeller.net

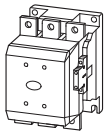
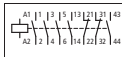
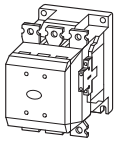
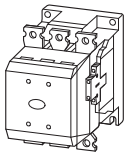
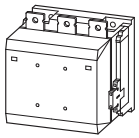
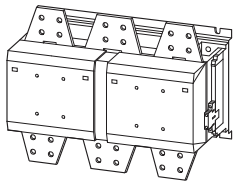
For all contactors the following applies:
- 660 V, 690 V or 1000 V: do not reverse directly
- Integrated suppressor circuit in actuating electronics.

DILM...-S contactors are actuated conventionally



① Stopping in the event of an emergency (emergency switching off)

Accessories	**Page**
Auxiliary contact modules	→ 5/40
Enclosures totally insulated	
Further actuating voltages	→ 5/81

	Rated operational current	Max. motor rating for three-phase motors 50 - 60 Hz								Conventional thermal current $I_{th} = I_e$ AC-1 at 60 °C	Circuit symbol
	AC-3	AC-3				AC-4				Open	
	380 V 400 V	220 V 230 V	**380 V 400 V**	660 V 690 V	1000 V	220 V 230 V	**380 V 400 V**	660 V 690 V	1000 V	$I_{th} = I_e$	
	Ie	P	**P**	P	P	P	**P**	P	P	A	
	A	kW	**kW**	kW	kW	kW	**kW**	kW	kW		
Contactors, comfort DILM											
	**185**	55	**90**	140	108	41	**75**	102	77	275	
	225	70	**110**	150	108	51	**90**	110	77	315	
	**250**	75	**132**	195	108	62	**110**	160	109	330	
	300	90	**160**	195	132	75	**132**	160	109	350	
	**400**	125	**200**	344	132	92	**160**	283	132	500	
	500	155	**250**	344	132	112	**200**	344	132	700	
	**580**	185	**315**	560	600	143	**250**	440	509	800	
	650	205	**355**	630	600	161	**280**	494	509	850	
	750	240	**400**	720	800	181	**315**	556	678	900	
	820	260	**450**	750	800	209	**355**	633	678	1000	
	1000	315	**560**	1000	1100	260	**450**	780	1000	1000	
	**1600**	500	**900**	1600	1770	430	**750**	1300	1650	1800	

Notes

[1] Availability from August 2010.
Previous DILM185/22 to DILM300/22, see Online Catalog at http://ecat.moeller.net

For all contactors the following applies:
- 660 V, 690 V or 1000 V: do not reverse directly
- Integrated suppressor circuit in actuating electronics.

When operating contactors DILM580 to DILM1600 behind a frequency inverter or mains with strong harmonic loads, the suppressor circuit on the load side must be removed.

During high-voltage tests, the suppressor circuit on the load-side for DILM580 to DILH2600 contactors must be disconnected (see instructional leaflet).

Control voltages

RA250 ≙ 110 V - 250 V AC/DC

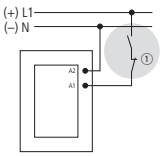
RAW250 ≙ 230 V - 250 V AC/DC

Accessories	**Page**
Auxiliary contact modules	→ 5/40
Suppressor circuits on load side	→ 5/65
Enclosures totally insulated	
Further actuating voltages	→ 5/76

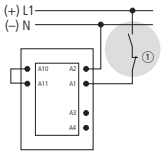
Part no.	**Price** See price list	Std. pack	Notes
DILM185A/22(RAC240)[1] 139537		1 off	
DILM225A/22(RAC240)[1] 139547			
DILM250/22(RA250)[2] 208201			
DILM300A/22(RA250)[1] [2] 139556			
DILM400/22(RA250)[3] 208209			
DILM500/22(RA250)[3] 208213			
DILM580/22(RA250)[3] 208216			
DILM650/22(RA250)[3] 208219			
DILM750/22(RA250)[3] 208222			
DILM820/22(RA250)[3] 208225			
DILM1000/22(RA250)[3] 267214			
DILM1600/22(RAW250)[3] 106727			

Conventional
A1/A2 are attached to power supply as normal

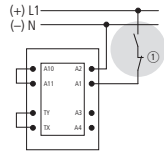
DILM 185 A, DILM 225 A



DILM250 to DILM1000, DILH1400

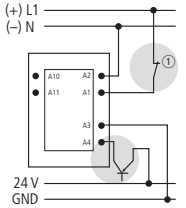


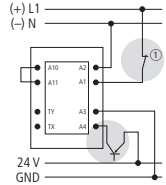
DILM1600 to DILH 2600



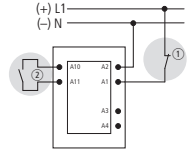
Directly from the PLC
A 24 V output from the PLC can be directly connected to the terminals A4/A24.

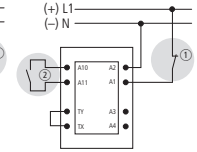






From a low-power command device
Low-power actuating devices such as PCB relays, pilot devices or position switches can be directly connected to A10/A11.





① Stopping in the event of an emergency (emergency switching off)
② Max. cable capacitance 6 nF

Information relevant for export to North America

[1]

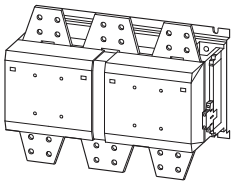
NA Certification	Request filed for UL and CSA

[2]

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.	1017510
CSA Class No.	3211-04
NA Certification	UL Listed, CSA certified

[3]

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	Additional approvals → Page 5/86

	Conventional thermal current $I_{th} = I_e$ AC-1 at 60 °C	Circuit symbol	**Part no.**	**Price** See price list	Std. pack
	Open				
	$I_{th} = I_e$				
	A				
DILH comfort devices AC-1					
	1400		**DILH1400/22(RAW250)**[1] 272441		1 off
	2000		**DILH2000/22(RAW250)**[1] 272442		
	2200		**DILH2200/22(RAW250)**[1] 111793		
	2600		**DILH2600/22(RAW250)**[2] 125945		

Notes

For all contactors the following applies:
- 660 V, 690 V or 1000 V: do not reverse directly
- Integrated suppressor circuit in actuating electronics.

When operating contactors DILM580 to DILM1600 behind a frequency inverter or mains with strong harmonic loads, the suppressor circuit on the load side must be removed.

During high-voltage tests, the suppressor circuit on the load-side for DILM580 to DILH2600 contactors must be disconnected (see instructional leaflet).

Control voltages

RAW250 ≙ 230 V - 250 V AC/DC

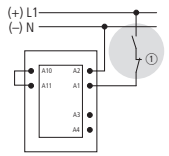
Accessories	**Page**
Auxiliary contact modules	→ 5/40
Suppressor circuits on load side	→ 5/65
Enclosures totally insulated	

Notes

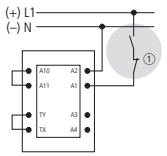
Conventional

A1/A2 are attached to power supply as normal

DILH1400



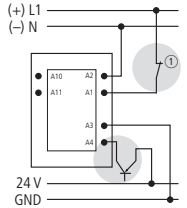
DILM1600 to DILH 2600

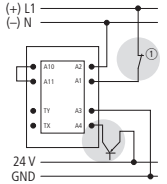


Directly from the PLC

A 24 V output from the PLC can be directly connected to the terminals A4/A24.

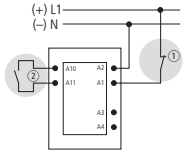


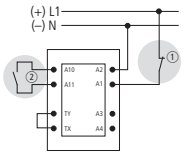




From a low-power command device

Low-power actuating devices such as PCB relays, pilot devices or position switches can be directly connected to A10/A11.





① Stopping in case of emergency (Emergency-stop)
② Max. cable capacitance 6 nF

Information relevant for export to North America

1)

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

2)

NA Certification	Request filed for UL and CSA