1				2			3	4		5	6	7	8
Rating Data UL/CSA maximum Horse-power rating (HP) 50/60 Hz				**AC 4** Inching and Plugging 30,000 Operations			General use con-tinuous current	Standard auxiliary contacts		**AC Operated** non-reversing		**DC Operated** non-reversing	
3 phase				**3 phase**						**Type**		**Type**	
							open (90% if enclosed)			**Important:** Add coil voltage and frequency from page **3**/46 - **3**/47 to end of type. See below for more details.		**Important:** Add coil voltage from page **3**/46 - **3**/47 to end of type. See below for more details.	
200 V HP	230 V HP	**460 V HP**	575 V HP	230 V HP	**460 V HP**	575 V HP	Amps	NO	NC				
30	30	**60**	75	20	**40**	50	120	2	2	**DIL 3-22**		**DIL 3-22/G**	
40	50	**100**	100	25	**50**	60	160	2	2	**DIL 4-22**		**DIL 4-22/G**	
60	75	**150**	175	50	**100**	125	210	2	2	**DIL 6-22**		**DIL 6-22/G**	
75	100	**200**	250	60	**125**	150	360	2	2	**DIL 8-22**		**DIL 8-22/G**	
125	150	**300**	350	–	**–**	–	400	2	2	**DIL 8A-22**		**DIL 8A-22/G**	

Additional Information	Page
Technical Data	**3**/50
Dimensions	**3**/61
Overload Relays	**4**/2
Accessories	**3**/35

Stock Coil Voltages

24 V 60 Hz
120 V 60 Hz / 110 V 50 Hz
208 V 60 Hz
240 V 60 Hz / 220 V 50 Hz
120 V DC

See page **3**/46 for other available coil voltages. Some DC coils may require use of a DC interposing relay.

General

Moeller Electric's **DIL** "Universal" contactors can provide a cost-effective solution for motor switching in applications that do not require the full modularity of **DIL...M** contactors.
They are UL listed and CSA certified and in compliance with IEC/EN 60 947 standards.
Universal Contactors are also CE marked.
2NO and 2NC auxiliary contacts are provided standard for each contactor. Each auxiliary contact can be reversed to achieve 3NO + 1NC, 1NO + 3NC or 4NC contact configurations.
Optional NO-early make and NC-late break contacts are also available.

How to Order

To Order Specify:	**Example:** 100 HP @ 460 V AC (column 1), 3 PH contactor, 2NO and 2NC auxiliary contacts and 120 V 60 Hz coil	
1 Type Number 2 Coil Voltage	Type Number	Coil Voltage
	DIL 4-22	**120 V 60 Hz**

			DIL 3	DIL 4	DIL 6	DIL 8	DIL 8A
General							
Specifications			UL, CSA, IEC/EN 60 947, CE , DIN VDE 0660				
Mechanical life-span							
AC operated		x 10^6 operations	10-15	10-15	10-15	10-15	1
DC operated		x 10^6 operations	1.5	1.5	1.5	0.4	0.4
Climatic Test		open	Damp heat, constant to IEC/EN 60 068, Pt. 2-3				
		enclosed	Damp heat, cyclic, to IEC/EN 60 068, Pt. 2-30				
Ambient temperature	open	max./min. C˚	+50/-25	+50/-25	+50/-25	+50/-25	+50/-25
	enclosed	max./min. C˚	+40/-25	+40/-25	+40/-25	+40/-25	+40/-25
Mounting position			Either vertical or inclined up to 30˚ in any direction from vertical				
Impact resistance of NO (NC) contacts, Duration 20 ms, (make/break)		g	7(4)	10(8)	13(9)	7(5)	7(5)
Dimensions		mm	See pages **3**/61				
Main Contacts							
Rated Voltage		V	600	600	600	600	600
Rated making capacity, AC							
cos = 0.35		A	1600	2100	2500	2900	3700
cos = 1		A	1620	2200	2600	3400	3900
Rated breaking capacity, AC	220-230 V	A	970	1800	2500	2900	3000
cos = 0.35	380-400 V	A	970	1800	2500	2900	3000
50 – 60 Hz	500 V	A	800	1700	1900	2900	2900
	660-690 V	A	620	1070	1120	1500	1100
Contactor life span							
AC1, AC3, AC4		ops	Consult Moeller Electric				
Current heat loss (3 poles)							
At continuous current rating I_{th}		W	25	75	116	120	125
Continuous current UL/CSA	open	A	140	160	210	360	400
50-60 Hz 3 pole	enclosed	A	126	144	189	324	360
AC 1-duty IEC/EN 60 947							
Continuous current I_{th}							
Δ Rated operating current I_e							
50-60 Hz 3 pole:	open	A	140	225	250	420	500
	enclosed	A	125	170	200	350	400
AC 3-duty							
Rated operating current I_e							
open and enclosed	230 V	A	103	170	204	300	360
50-60 Hz	500 V	A	78	127	182	285	355
	660 V	A	60	98	140	214	–
AC 4-duty							
Rated operating current I_e							
open and enclosed	230 V	A	52	75	125	180	250
50-60 Hz	500 V	A	54	78	127	182	220
	660 V	A	42	60	98	140	–
Main Terminals							
Wire capacity One Conductor							
(Cu cable)	Min.	AWG	#6	#6	#6	#1/0	#1/0
	Max.	AWG	#2/0	250 kcmil	300 kcmil	500 kcmil	500 kcmil
Wire capacity Two Conductors							
(Cu cable)	Min.	AWG	#18	#18	#18	#1/0	#1/0
	Max.	AWG	#4	#2	#1/0	250 kcmil	250 kcmil

AC				DC
DIL 4-22, DIL 6-22 Universal Contactors				
Standard coils	48 V 50 Hz 240 V 50 Hz 500 V 50 Hz	110 V 60 Hz 115 V 60 Hz 208 V 60 Hz 600 V 60 Hz	42 V 50 Hz, 48 V 60 Hz 110 V 50 Hz, 120 V 60 Hz 190 V 50 Hz, 220 V 60 Hz 220 V 50 Hz, 240 V 60 Hz 230 V 50 Hz, 240 V 60 Hz 380 V 50 Hz, 440 V 60 Hz 400 V 50 Hz, 440 V 60 Hz 415 V 50 Hz, 480 V 60 Hz	24 V DC[1] 48 V DC[1] 60 V DC 110 V DC 120 V DC 220 V DC 240 V DC
Non-standard coils[2]	42-600 V 50 Hz or 42-600 V 60Hz			
DIL 8-22, DIL 8A-22 Universal Contactors				
Standard coils	240 V 50 Hz 500 V 50 Hz	110 V 60 Hz 115 V 60 Hz 208 V 60 Hz 600 V 60 Hz	110 V 50 Hz, 120 V 60 Hz 190 V 50 Hz, 220 V 60 Hz 220 V 50 Hz, 240 V 60 Hz 230 V 50 Hz, 240 V 60 Hz 380 V 50 Hz, 440 V 60 Hz 400 V 50 Hz, 440 V 60 Hz 415 V 50 Hz, 480 V 60 Hz	24 V DC[1] 48 V DC[1] 60 V DC 110 V DC 120 V DC 220 V DC 240 V DC
Non-standard coils[2]	110-600 V 50 Hz or 110-600 V 60Hz			
S-PKZ 2 Contactor for PKZ 2/ZM-.../S-SP Self-protected Combination Controller				
Standard coils	24 V 60 Hz 208 V 60 Hz 600 V 60 Hz	110 V 50 Hz, 120 V 60 Hz 230 V 50 Hz, 240 V 60 Hz 415 V 50 Hz, 480 V 60 Hz		

1) Requires the addition of a DC interposing relay **DIL R-22-G**.
2) There is an additional cost for non-standard coils.

DIL M 185/22, DIL M 225/22, DIL M 250/22, DIL M 300/22, DIL M 400/22, DIL M 500/22 Contactors

Coils including electronic module	**RDC 48**	Coil Range: 24-48 V DC
	RA 110	Coil Range: 48-110 V 40-60 Hz/DC
	RA 250	Coil Range: 110 - 250 V 40-60 Hz/DC
	RAC 500	Coil Range: 250-500 V 40-60Hz

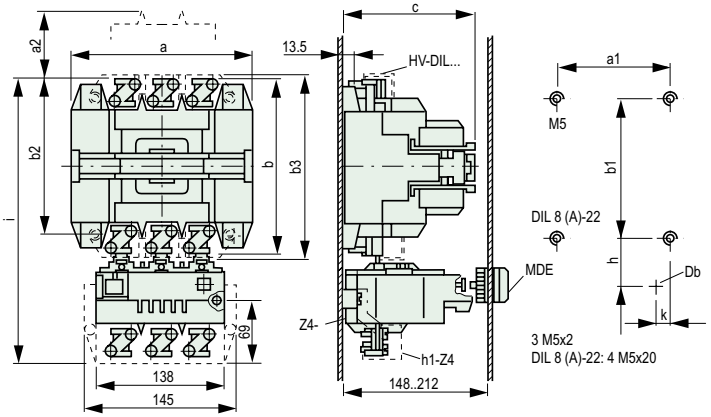
Note: Part numbers in green shaded area above must be added to complete contactor type (p **3**/4, 8) and replacement coil type (p **3**/45).

Example: **DIL M185/22 (RA 110)**
DIL M250-XSP/E (RA 110)

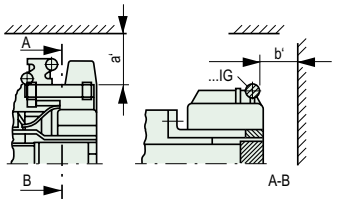
Universal Contactors

DIL 3-22/Z4
DIL 4-22/Z4
DIL 6-22/Z4
DIL 8-22/Z4
DIL 8A-22/Z4

Reset Button
MDE-287



DIL Z	3-22 4.../K 3	4-22 4...	6-22 4...	8(A)-22 4.../K 8
a = b	136	158	182	230
c	131	141	150	190
a1 = b1	118	136	150	192
a2	70	70	70	90
b2	127	147	166	211
h	54	58	57	69
i	254	278	296	353
k	14	23	30	51
b3	152	176	200	252



Minimum clearance a' and b' between **DIL.../G** and neighboring components

DIL	3-22/G	4-22/G	6-22/G	8(A)-22/G
a'	65	65	65	65
b'	15	15	15	10

DIL 8-22/ZW7
DIL 8A-22/ZW7