

3 Series MCCB



Range Presentation

HDM3 is Himel 3 series range of molded case circuit breakers with fixed thermal magnetic trip unit, providing line protection and motor protection, up to 1600A.

HDM3E is Himel 3 series range of MCCB with electronic type trip unit, providing LSI protection, up to 1600A.

HDM3L is Himel 3 series range of earth leakage MCCB, providing protection against residual current, up to 630A.

Features

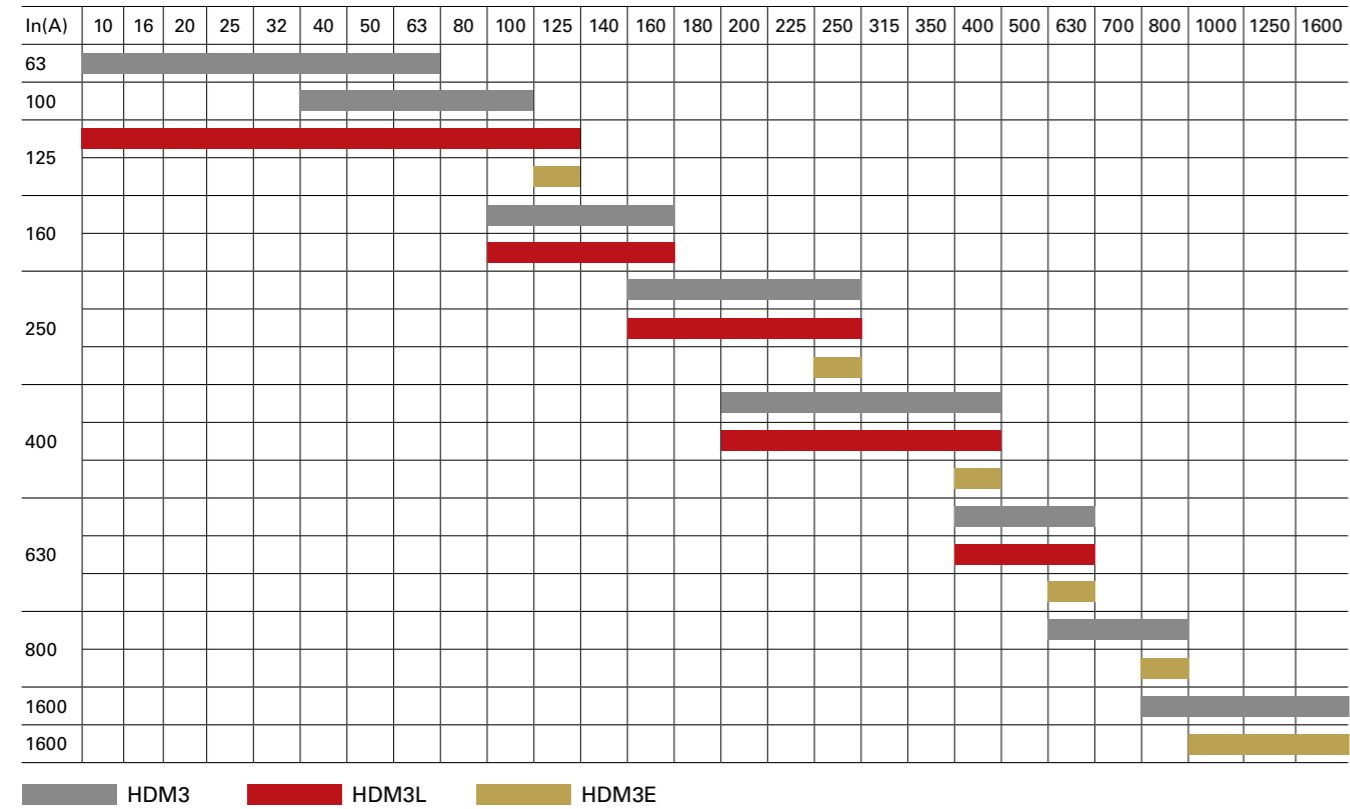
Easy Installation and Safe Operation

◆ Double-deck cover design assures easy installation and removal of accessories.

High Performance

◆ Patented design ensures quick extinguishing of arc.
◆ Suitable for wide environment conditions, max. -40°C ~+70°C

Range Presentation



Online Content



HDM3



HDM3E



HDM3L

3 Series MCCB



Selection Guide

MCCB Selection Code

Range Name	Frame Size	Breaking apacity (Icu/Ics)	Rated current	Poles	Protection
HDM3	250	L	250	3	3XX
HDM3 MCCB	63: 63A	L: 18/18kA S: 25/18kA	10,16,20,25,32,40,50,63A	3: 3P B*: 4P	2XX2: Mag only motor protection 3XX: Mag-Therma line protection
	100: 100A	L: 18/18kA S: 25/18kA T: 36/36kA N: 50/30KA	40,50,63,80,100A		
	160: 160A	L: 21/21kA S: 35/21kA T: 36/36kA N: 60/36KA	100,125,140,160A		
	250: 250A	L: 21/21kA S: 35/21kA T: 36/36kA N: 60/36KA	160,180,200,225,250A		
	400: 400A	F: 50/30 T: 39/39kA N: 70/39kA	200,225,250,315,350,400A		
	630: 630A	F: 50/30kA T: 39/39kA N: 70/39kA	400,500,630A		
	800: 800A	M: 40/40kA F: 70/40kA	500,630,700,800A		
	1600: 1600A	N: 70/50kA	800,1000,1250,1600A		
HDM3E Electronic type MCCB	125: 125A	M: 50/50kA	125: 125A	3: 3P C*: 4P	3XX: Electronic tripping, line protection
	250: 250A		250: 250A		
	400: 400A		400: 400A		
	630: 630A		630: 630A		
	800: 800A		800: 800A		

3 Series MCCB



Earth Leakage MCCB Selection Code

Series Name	Frame Size	Breaking capacity	Rated current	Poles	Trip unit and Protection	Residual current	Time delay
HDM3L	25	S	250	3	3X0	A	1
HDM3L	12: 125A	F: 50/30kA	16,20,25,32,40,50,63, 80,100,125A	3: 3P B*: 4P	3X0: line protection	A: 30/100/300 B: 100/300/500 C: 300/500/1000	0: No delay 1: 0.1/0.2/0.3s 2: 0.4/0.5/1s 3: 0.1/0.3/0.5s
	16: 160A		100,125,140,160A				
	25: 250A		160,180, 200, 225,250 A				
	40: 400A	F: 70/42kA	200,225,250,315, 350,400				
	63: 630A	F: 70/40kA	400,500,630A				

1600A HDM3E MCCB Selection Code

Series Name	Frame size	Breaking Capacity	Rated current	Poles	Trip unit	MCH +XF	MX	MN	Controller
HDM3E	16	M	16	3	F	5	5	5	L
HDM3E	16 : 1600A	M: 50/50kA	10: 1000A 12: 1250A 16: 1600A	3: 3P 4: 4P	F: Fixed front connection	5: Without MCH+XF N: AC230V V: AV400V D: DC220V	5: Without Shunt release N: AC230V V: AV400V D: DC220V	5: Without undervoltage release N: AC230V V: AV400V	L: iTR326

Note:
 B: The N phase is equipped with contacts, but without protection. It closes earlier and opens later than the other 3 poles.
 C: The N phase is equipped with contacts, and with protection. It closes earlier and opens later than the other 3 poles.
 "T" is thermal trip calibrated in 50 degree. please contact with HIMEL local office, if you required.

3 Series MCCB



Technical Parameters		HDM3-63	HDM3-100	HDM3-160	HDM3-250	HDM3-400	HDM3-630	HDM3-800	HDM3-1250															
MCCB																								
Rated Voltage Ue(V)		400/415																						
Rated insulation Voltage Ui(V)		690	800	800	800	800	800	800	800															
Rated impulse withstand voltage Uimp(kV)		6	8	8	8	8	8	8	8															
Rated frequency(Hz)		50/60																						
Rated current In(A)		10-63	40-100	100-160	160-250	200-400	400-630	630-800	800-1250															
Number of poles		3/4																						
Use Category		A																						
Breaking capacity	Breaking Class	L	S	L	S	T	N	L	S	T	N	L	S	T	N	F	T	N	F	T	N	M	F	N
	Icu(kA) 400/415V AC	18	25	18	25	30	50	21	35	36	60	21	35	36	60	50	39	70	50	39	70	40	70	85
	Ics(kA) 400/415V AC	18	18	18	18	30	30	21	21	36	36	21	21	36	36	30	39	39	30	39	39	40	40	45
Mechanical life		20000	20000	20000	20000	10000	10000	5000	5000															
Electrical life	AC 400/415V	8000	8000	8000	8000	7500	7500	2500	2500															
Power distribution protection	Thermal magnetic trip unit	■	■	■	■	■	■	■	■															
Motor protection	Magnetic trip unit	■	■	■	■	■	■	-	-															
Isolation function		■	■	■	■	■	■	■	■															
Certification		TUV, CE	TUV, CE	KEMA, CE	KEMA, CE	KEMA, CE	KEMA, CE	KEMA, CE	KEMA, CE	TUV-CB														

Technical Parameters		HDM3E-125	HDM3E-250	HDM3E-400	HDM3E-630	HDM3E-800	HDM3E-1600
Electronic type MCCB							
Rated Voltage Ue(V)		400/415					
Rated insulation Voltage Ui(V)		800	800	800	800	1000	1000
Rated impulse withstand voltage Uimp(kV)		8	8	8	8	12	12
Rated frequency(Hz)		50/60					
Rated current In(A)		125	250	400	630	800	1000/1250/1600
Number of poles		3/4					
Use Category		A	A	B	B	B	B
Breaking capacity	Breaking Class	M	M	M	M	M	M
	Icu(kA) 400/415V AC	50	50	50	50	50	50
	Ics(kA) 400/415V AC	50	50	50	50	50	50
	Icw(kA) 400/415V AC	2.5(1s)	2.5(1s)	5(1s)	8(1s)	10(1s)	42(1s)
Mechanical life		20000	20000	1000	1000	5000	12500
Electrical life	AC 400/415V	8000	8000	7500	7500	2500	6000
Power distribution protection	Electronic trip unit	■	■	■	■	■	■
Isolation function		■	■	■	■	■	■
Certification		TUV, CE	TUV, CE	TUV, CE	TUV, CE	TUV, CE	TUV, CE

3 Series MCCB



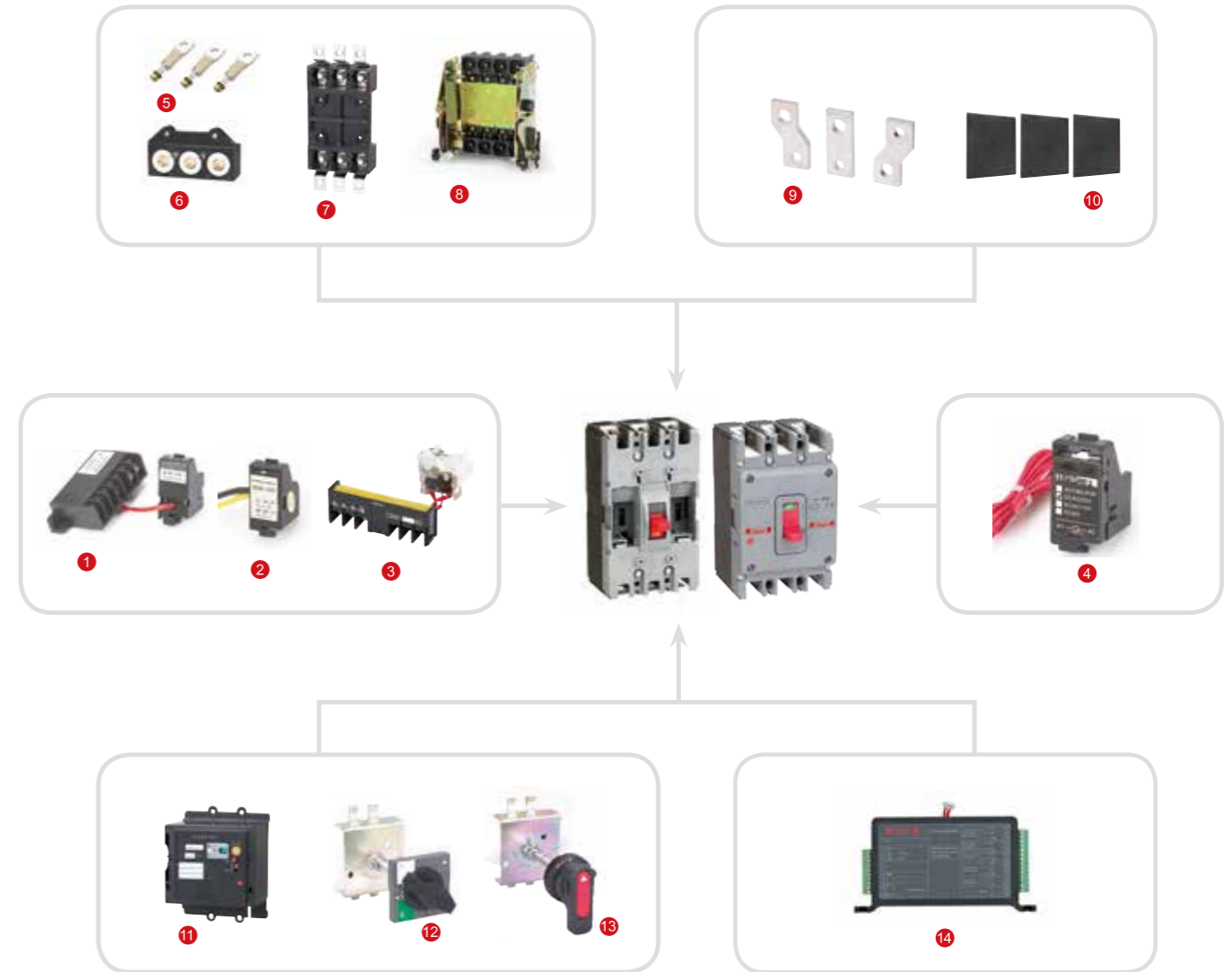
Technical Parameters						
Earth leakage MCCB		HDM3L-125	HDM3L-160	HDM3L-250	HDM3L-400	HDM3L-630
Rated voltage Ue(V)		400/415				
Rated insulation voltage Ui(V)		800	800	800	800	800
Rated impulse withstand voltage Uimp(kV)		8	8	8	8	8
Rated frequency(Hz)		50/60				
Rated current In(A)		16-125	100-160	160-250	200-400	400-630
Number of poles		3/4				
Use category		A				
Breaking capacity	Breaking class	F	F	F	F	F
	Icu(kA) 400/415V AC	50	50	50	70	70
	Ics(kA) 400/415V AC	30	30	30	42	40
	Icw(kA) 400/415V AC	25% Icu				
Mechanical life		20000	20000	20000	10000	10000
Electrical life AC 400/415V		8000	8000	8000	7500	7500
Power distribution protection		Electric trip unit				
Isolation function		■				
Leakage protection		■				
Rated residual operating current IΔn mA (three rating adjustable)	Non-delay type	30, 100, 300	30, 100, 300	30, 100, 300	100, 300, 500	100, 300, 500
	Delay type	100, 300, 500	100, 300, 500	100, 300, 500	100, 300, 500	100, 300, 500
Rated residual non-tripping current IΔno (mA)		50% IΔn				
Non-delay type: breaking time (s)		≤ 0.2				
Fixed delay: 2IΔn limit non-actuating time (s)		0.1/0.2/0.3/0.4/0.5/1	0.1/0.2/0.3/0.4/0.5/1	0.1/0.2/0.3/0.4/0.5/1	0.1/0.2/0.3/0.4/0.5/1	-
Delay adjustable type: 2IΔn limit non-actuating time (s)		0.1/0.2/0.3	0.1/0.2/0.3	0.1/0.2/0.3	0.1/0.2/0.3	0/0.2/0.5
		0.4/0.5/1	0.4/0.5/1	0.4/0.5/1	0.4/0.5/1	-
Certification		CE	CE	CE	CE	CE

3 Series MCCB



Accessories HDM3/HDM3L/HDM3E 125-800

Overview of Accessories



- | | | |
|-------------------------|----------------------------|--------------------------------------|
| 1 Undervoltage release | 6 Plug-in rear connection | 11 Electric operating mechanism |
| 2 Auxiliary contact | 7 Plug-in front connection | 12 Square handle operating mechanism |
| 3 Alarm contact | 8 Withdrawable connection | 13 Round handle operating mechanism |
| 4 Shunt release | 9 Extension terminal | 14 Modbus RTU (for HDM3E 125-800) |
| 5 Fixed rear connection | 10 Interphase barriers | |

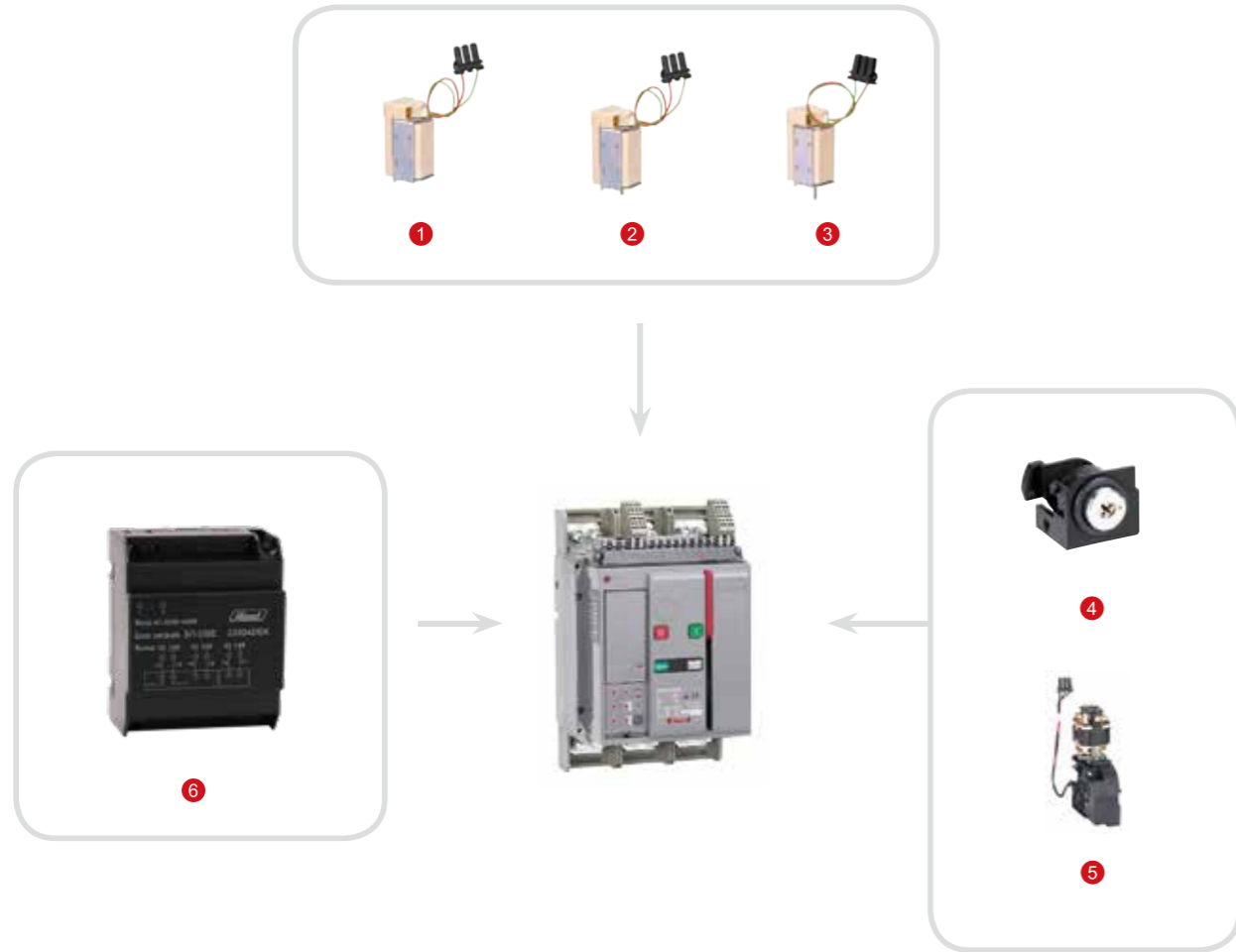
Note: For full information about the accessories. Please go on Himel website to download "MCCB catalogue"

3 Series MCCB



Accessories HDM3E 1600

Overview of Accessories



- | | | | | | |
|---|---------------|---|----------------------|---|--------------|
| 1 | Close release | 3 | Undervoltage release | 5 | Motor |
| 2 | Shunt release | 4 | Key lock | 6 | Power Module |

3 Series MCCB



Accessories Selection Guide



Frame size	Contact	Auxiliary contact with wire		Auxiliary contact with Terminal		
		Left	Right	Left	Right 3P	Right 4P
HDM3-63 HDM3-100L/S	1NC+1NO	HDM363OF11K1BL	HDM363OF11K1BR	HDM363OF21K1BL	HDM363OF21K1BR3P	HDM363OF21K1BR4P
HDM3-100M/F/T/N HDM3L-125	1NC+1NO	HDM3100FNOF11K1BL	HDM3100FNOF11K1BR	HDM3100FNOF21K1B	HDM3100FOF21K1BR3	HDM3100FOF21K1BR4
HDM3-160/250 HDM3E-125/250 HDM3L-160/250	1NC+1NO	HDM3250OF11K1BL	HDM3250OF11K1BR	HDM3250OF21K1BL	HDM3250OF21K1BR3	HDM3250OF21K1BR4
	2NC+2NO	HDM3E250OF12K2BL	HDM3E250OF12K2BR	HDM3E250OF22K2BL	HDM3E250OF22K2BR3	HDM3E250OF22K2BR4
HDM3-400/630 HDM3E-400/630/800 HDM3L-400	1NC+1NO	HDM3630OF11K1BL	HDM3630OF11K1BR	HDM3630OF21K1BL	HDM3630OF21K1BR3	HDM3630OF21K1BR4
	2NC+2NO	HDM3E630OF12K2BL	HDM3E630OF12K2BR	HDM3E630OF22K2BL	HDM3E630OF22K2BR3	HDM3E630OF22K2BR4
HDM3-800 HDM3L-630	1NC+1NO	HDM3800OF11K1BL	HDM3800OF11K1BR	HDM3800OF21K1BL	HDM3800OF21K1BR3	HDM3800OF21K1BR4

Note: Right side mounted part is not adept with HDM3L MCCB



Frame size	Alarm contact with wire		Alarm contact with Terminal		
	Left	Right	Left	Right 3P	Right 4P
HDM3-63 HDM3-100L/S	HDM363AL1L	HDM363AL1R	HDM363AL2L	HDM363AL2R3P	HDM363AL2R4P
HDM3-100M/F/T/N HDM3L-125	HDM3100FNAL1L	HDM3100FNAL1R	HDM3100FNAL2L	HDM3100FNAL2R3P	HDM3100FNAL2R4P
HDM3-160/250 HDM3E-125/250 HDM3L-160/250	HDM3250AL1L	HDM3250AL1R	HDM3250AL2L	HDM3250AL2R3P	HDM3250AL2R4P
HDM3-400/630 HDM3E-400/630/800 HDM3L-400	HDM3630AL1L	HDM3630AL1R	HDM3630AL2L	HDM3630AL2R3P	HDM3630AL2R4P
HDM3-800 HDM3L-630	HDM3800AL1L	—	HDM3800AL2L	—	—

Note: Right side mounted part is not adept with HDM3L MCCB

3 Series MCCB



Frame size	Auxiliary Alarm with wire		Auxiliary Alarm with Terminal		
	Left	Right	Left	Right 3P	Right 4P
HDM3-63 HDM3-100L/S	HDM363OFAL1L	HDM363OFAL1R	HDM363OFAL2L	HDM363OFAL2R3P	HDM363OFAL2R4P
HDM3-100M/F/T/N HDM3L-125	HDM3100FNOFAL1L	HDM3100FNOFAL1R	HDM3100FNOFAL2L	HDM3100FNOFAL2R3	HDM3100FNOFAL2R4
HDM3-160/250 HDM3E-125/250 HDM3L-160/250	HDM3250OFAL1L	HDM3250OFAL1R	HDM3250OFAL2L	HDM3250OFAL2R3P	HDM3250OFAL2R4P
HDM3-400/630 HDM3E-400/630/800 HDM3L-400	HDM3630OFAL1L	HDM3630OFAL1R	HDM3630OFAL2L	HDM3630OFAL2R3P	HDM3630OFAL2R4P
HDM3-800 HDM3L-630	HDM3800OFAL1L	—	HDM3800OFAL2L	—	—

Note: Right side mounted part is not adept with HDM3L MCCB



Frame size	Under voltage release with Terminal	
	Voltage	Left
HDM3-63 HDM3-100L/S	AC230V	HDM363MNA2L
	AC400V	HDM363MNA3L
HDM3-100M/F/T/N HDM3L-125	AC230V	HDM3100FNMNA2L
	AC400V	HDM3100FNMNA3L
HDM3-160/250 HDM3L-160/250 HDM3E-125/250	AC230V	HDM3E125250MNA2L
	AC400V	HDM3E125250MNA3L
HDM3-400/630 HDM3L-400 HDM3E-400/630/800	AC230V	HDM3E400630MNA2L
	AC400V	HDM3E400630MNA3L
HDM3-800 HDM3L-630	AC230V	HDM3800MNA2L
	AC400V	HDM3800MNA3L
HDM3-1250	AC230V	HDM31250MNA2
	AC400V	HDM31250MNA3

Under voltage release with Terminal

3 Series MCCB



Frame size	Voltage	Shunt release with wire		Shunt release with Terminal		
		Left	Right	Left	Right 3P	Right 4P
HDM3-63 HDM3-100L/S	AC230V	—	HDM363MX1A2	—	HDM363MX2A23P	HDM363MX2A24P
	AC400V	—	HDM363MX1A3	—	HDM363MX2A33P	HDM363MX2A34P
	DC24V	—	HDM363MX1D2	—	HDM363MX2D23P	HDM363MX2D24P
HDM3-100M/F/T/N	AC230V	HDM3100FNMX1A2L	HDM3100FNMX1A2	HDM3100FNMX2A2L	HDM3100FNMX2A23P	HDM3100FNMX2A24P
	AC400V	HDM3100FNMX1A3L	HDM3100FNMX1A3	HDM3100FNMX2A3L	HDM3100FNMX2A33P	HDM3100FNMX2A34P
	DC24V	HDM3100FNMX1D2L	HDM3100FNMX1D2	HDM3100FNMX2D2L	HDM3100FNMX2D23P	HDM3100FNMX2D24P
HDM3-160/250 HDM3E-125/250 HDM3L-160/250	AC230V	HDM3250MX1A2L	HDM3250MX1A2	HDM3250MX2A2L	HDM3250MX2A23P	HDM3250MX2A24P
	AC400V	HDM3250MX1A3L	HDM3250MX1A3	HDM3250MX2A3L	HDM3250MX2A33P	HDM3250MX2A34P
	DC24V	HDM3250MX1D2L	HDM3250MX1D2	HDM3250MX2D2L	HDM3250MX2D23P	HDM3250MX2D24P
	DC110V	—	HDM3E125250MX1D11	—	HDM3E250MX2D113P	HDM3E250MX2D114P
	DC220V	—	HDM3E125250MX1D22	—	HDM3E250MX2D223P	HDM3E250MX2D224P
HDM3-400/630 HDM3E-400/630/800 HDM3L-400	AC230V	HDM3630MX1A2L	HDM3630MX1A2	HDM3630MX2A2L	HDM3630MX2A23P	HDM3630MX2A24P
	AC400V	HDM3630MX1A3L	HDM3630MX1A3	HDM3630MX2A3L	HDM3630MX2A33P	HDM3630MX2A34P
	DC24V	HDM3630MX1D2L	HDM3630MX1D2	HDM3630MX2D2L	HDM3630MX2D23P	HDM3630MX2D24P
	DC110V	—	HDM3E400630MX1D11	—	HDM3E630MX2D113P	HDM3E630MX2D114P
	DC220V	—	HDM3E400630MX1D22	—	HDM3E630MX2D223P	HDM3E630MX2D224P
HDM3-800 HDM3L-630	AC230V	HDM3800MX1A2L	HDM3800MX1A2R	HDM3800MX2A2L	HDM3800MX2A2R3P	HDM3800MX2A2R4P
	AC400V	HDM3800MX1A3L	HDM3800MX1A3R	HDM3800MX2A3L	HDM3800MX2A3R3P	HDM3800MX2A3R4P
	DC24V	HDM3800MX1D2L	HDM3800MX1D2R	HDM3800MX2D2L	HDM3800MX2D2R3P	HDM3800MX2D2R4P
HDM3-1250	AC230V	—	—	—	HDM31250MX2A2R	—

Note: Right side mounted part is not adept with HDM3L MCCB

3 Series MCCB



Front connection



Rear connection

Frame size	Plug-in		
	Connection type	3P	4P
HDM3-63 HDM3-100L/S	Front connection	HDM363PFC3	HDM363PFC4
	Rear connection	HDM363PRC3	HDM363PRC4
HDM3-100M/F/T/N	Front connection	HDM3100FNPFC3	HDM3100FNPFC4
	Rear connection	HDM3100FNPRC3	HDM3100FNPRC4
HDM3-160/250L/S	Front connection	HDM3250SPFC3	HDM3250SPFC4
	Rear connection	HDM3250SPRC3	HDM3250SPRC4
HDM3-160/250M/F/T/N HDM3E-125/250	Front connection	HDM3E125250PFC3	HDM3E125250PFC4
	Rear connection	HDM3E125250PRC3	HDM3E125250PRC4
HDM3-400 HDM3E-400 HDM3-630 HDM3E-630	Rear connection	HDM3E630PRC3	HDM3E630PRC4
HDM3-800	Rear connection	HDM3800PRC3	HDM3800PRC4
HDM3E-800	Rear connection	HDM3E800PRC3	HDM3E800PRC4
HDM3-1250	—	—	—



Frame size	Motor		
	AC230V	AC400V	DC220V
HDM3-63 HDM3-100L/S	HDM363D1A2	HDM363D1A3	HDM363D2
HDM3-100M/F/T/N	HDM3100FND1A2	HDM3100FND1A3	HDM3100FND2
HDM3-160/250L/S HDM3-160/250M/F/T/N	HDM3250FD1A2	HDM3250FD1A3	HDM3250FD2
HDM3E-125/250	HDM3E125250D2	HDM3E125250D4	—
HDM3-630 HDM3E-630	HDM3630D1A2	HDM3630D1A3	HDM3630D2
HDM3-800	HDM3800D1A2	HDM3800D1A3	—
HDM3E-800	HDM3E800D2	HDM3E800D4	—
HDM3-1250	HDM31250CD1A2	HDM31250CD1A3	—

3 Series MCCB



Frame size	Rotation Handle		
	Handle shape	Direct	Extended (Default 150mm)
HDM3-63 HDM3-100L/S	Round	HDM363H1	HDM363HL1
	Square	HDM363H2	HDM363HL2
HDM3-100M/F/T/N	Round	HDM3100FNH1	HDM3100FNHL1
	Square	HDM3100FNH2	HDM3100FNHL2
HDM3-160/250	Round	HDM3250H1	HDM3250HL1
	Square	HDM3250H2	HDM3250HL2
HDM3-400/630	Round	HDM3630H1	HDM3630HL1
	Square	HDM3630H2	HDM3630HL2
HDM3-800	Round	HDM3800H1	HDM3800HL1
	Square	HDM3800H2	HDM3800HL2
HDM3E-125/250	Round	HDM3E125250H1	HDM3E125250HL1
	Square	HDM3E125250H2	HDM3E125250HL2
HDM3E-400/630	Round	HDM3E400630H1	HDM3E400630HL1
	Square	HDM3E400630H2	HDM3E400630HL2
HDM3E-800	Round	HDM3E800H1	HDM3E800HL1
	Square	HDM3E800H2	HDM3E800HL2



Round



Square

Note: Default length of rod is 150mm. If require more, please order below rod individually.

	175mm	200mm	300mm
Under 250A:	HDM3E-8X8ROD175	HDM3-8x8ROD200	HDM3-8x8ROD300
Over 250A:	HDM3E-10X10ROD175	HDM3-10x10ROD200	HDM3-10x10ROD300

Frame size	Draw-out		
	Connection type	3P	4P
HDM3-400 HDM3E-400	Horizontal connection	HDM3E400DOR3	HDM3E400DOR4
HDM3-630 HDM3E-630	Horizontal connection	HDM3E630DOR3	HDM3E630DOR4
HDM3E-800	Horizontal connection	HDM3E800DOR3	HDM3E800DOR4



3 Series MCCB



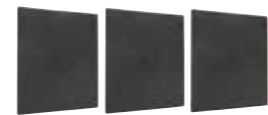
Frame size	Expanding terminal	
	3P(3pcs)	4P(4pcs)
HDM3-63 HDM3-100L/S	HDM363C3	HDM363C4
HDM3-100M/F/T/N HDM3L-125	HDM3100FNC3	HDM3100FNC4
HDM3-160/250L/S HDM3-160/250M/F/T/N HDM3L-160/250 HDM3E-125/250	HDM3250C3	HDM3250C4
HDM3-400 HDM3L-400 HDM3E-400 HDM3-630 HDM3E-630	HDM3630C3	HDM3630C4
HDM3-800 HDM3E-800 HDM3L-630	HDM3E800C3	HDM3E800C4



Frame size	Modbus RTU module
HDM3E-125	HDM3ECOM
HDM3E-250	
HDM3E-400	
HDM3E-630	
HDM3E-800	



Frame size	Interphase barriers	
	3P(2pcs)	4P(3pcs)
HDM3-63 HDM3-100L/S	HDM363IB3	HDM363IB4
HDM3-100M/F/T/N HDM3L-125	HDM3100FNIB3	HDM3100FNIB4
HDM3-160/250L/S	HDM3250SIB3	HDM3250SIB4
HDM3-160/250M/F/T/N HDM3L-160/250 HDM3E-125/250	HDM3250FIB3	HDM3250FIB4
HDM3-400 HDM3L-400 HDM3E-400 HDM3-630 HDM3E-630	HDM3630IB3	HDM3630IB4
HDM3-800 HDM3L-630	HDM3800IB3	HDM3800IB4
HDM3E-800	HDM3E800IB3	HDM3E800IB4



3 Series MCCB



Frame size	Rear connection	
	3P(6pcs)	4P(8pcs)
HDM3-63 HDM3-100L/S	HDM363RC3	HDM363RC4
HDM3-100M/F/T/N HDM3L-125	HDM3100FNRC3	HDM3100FNRC4
HDM3-160/250 HDM3L-160/250 HDM3E-125/250	HDM3250RC3	HDM3250RC4
HDM3-400/630 HDM3L-400 HDM3E-400/630	HDM3630RC3	HDM3630RC4
HDM3-800 HDM3E-800 HDM3L-630	HDM3800RC3	HDM3800RC4



Frame size	Expanding terminal	
	3P(3pcs)	4P(4pcs)
HDM3-63 HDM3-100L/S	LUG100S1	LUG100S1E
HDM3-100M/F/T/N HDM3L-125	LUG100F1	LUG100F1E
HDM3-160 HDM3L-160 HDM3E-125	LUG1601	LUG1601E
HDM3-160/250 HDM3L-160/250 HDM3E-125/250	—	LUG2502E
HDM3-400 HDM3L-400 HDM3E-400	LUG4001	LUG4001E
HDM3-400/630 HDM3L-400 HDM3E-400/630	—	LUG6302E
HDM3-800 HDM3L-630 HDM3E-800	—	LUG8004E



HDM3E-1600A Accessories		
Acc Name	AC230V	AC400V
Close release	HDW3XF2A	HDW3XF3A
Shunt release	HDW3MX2A	HDW3MX3A
Undervoltage release	HDW3MN2A	HDW3MN3A
Motor	HDW3MCH162A	HDW3MCH163A

1600A Accessories		
Acc Name	AC220~400V Input	DC220/110V Input
Power module	IAPU334	IAPU332D

HDM3S MCCB



Range Presentation

HDM3S is himel 3 series range of moulded case circuit breakers with adjustable thermal magnetic trip unit, providing line protection, up to 630A

Features

- ◆ Double-deck cover design assures easy installation and removal of accessories.
- ◆ Thermal adjustable range (0.8~1)I_n, magnetic adjustable range (5~10)I_n
- ◆ All series I_{cs}=100%I_{cu}.

Online Content



HDM3S

MCCB Selection Code

Range name	Frame size	Breaking capacity	Rated current	Poles	Protection	Temperature
HDM3S	160	M	160	3	3XX	

HDM3S	160: 160A 250: 250A	M: 35/35kA	025: 25A 032: 32A ...	3: 3P B: 4P*	3XX: Thermal-magnetic adjustable 2XX: Magnetic protection, Magnetic adjustable only 1XX: Thermal-magnetic protection, Thermal adjustable only	Default: 40°C T: 50°C
	400: 400A 630: 630A	M: 50/50kA	500: 500A 630: 630A			

Note: 1. B: The N phase is equipped with contacts, but without protection. It closes earlier and opens later than the other 3 poles.
2. If 2xx, 1xx products required, please confirm with local Himel sales office
3. Thermal -magnetic adjustable (3XX), the minimum I_n=63A
4. "T" is thermal trip calibrated in 50 degree. please contact with HIMEL local office, if you required

Frame size(A)	Rated Current (A) @40°C I _n															
	25	32	40	50	63	80	100	125	140	160	200	250	320	400	500	630
160																
250																
400																
630																

Technical Parameters

Frame	HDM3S-160	HDM3S-250	HDM3S-400	HDM3S-630
Standard	IEC 60947-2	IEC 60947-2	IEC 60947-2	IEC 60947-2
[U _{imp}] rated impulse withstand voltage	8kV	8kV	8kV	8kV
[U _i] rated insulation voltage	AC1000V	AC1000V	AC1000V	AC1000V
Network frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
[U _e] rated operational voltage	400/415VAC	400/415VAC	400/415VAC	400/415VAC
Poles	3/4	3/4	3/4	3/4
Suitability for isolation	Yes	Yes	Yes	Yes
Utilisation category	Category A	Category A	Category A	Category A
[I _n]Current	25/32/40/50	63/80/100/125/160	140/160/200/250	250/320/400
Thermal Adjustable	0.8,0.9,1.0	0.8,0.9,1.0	0.8,0.9,1.0	0.8,0.9,1.0
Magnetic Adjustable	/	5,6,7,8,9,10	5,6,7,8,9,10	5,6,7,8,9,10
Breaking Capacity	M	M	M	M
400VAC I _{cu}	35	35	50	50
400VAC I _{cs}	35	35	50	50
Mechanical Life	8500	7000	4000	4000
Electrical Life	1500	1000	1000	1000
Dimension (WxHxD)	90-155-108(3P)/ 120-155-108(4P)	105-165-116(3P)/ 140-165-116(4P)	140-257-155(3P)/ 184-257-155(4P)	140-257-155(3P)/ 184-257-155(4P)
Ambient air temperature for operation	40/50 °C	40/50 °C	40/50 °C	40/50 °C
Certificates	TUV/ CB	TUV/ CB	TUV/ CB	TUV/ CB

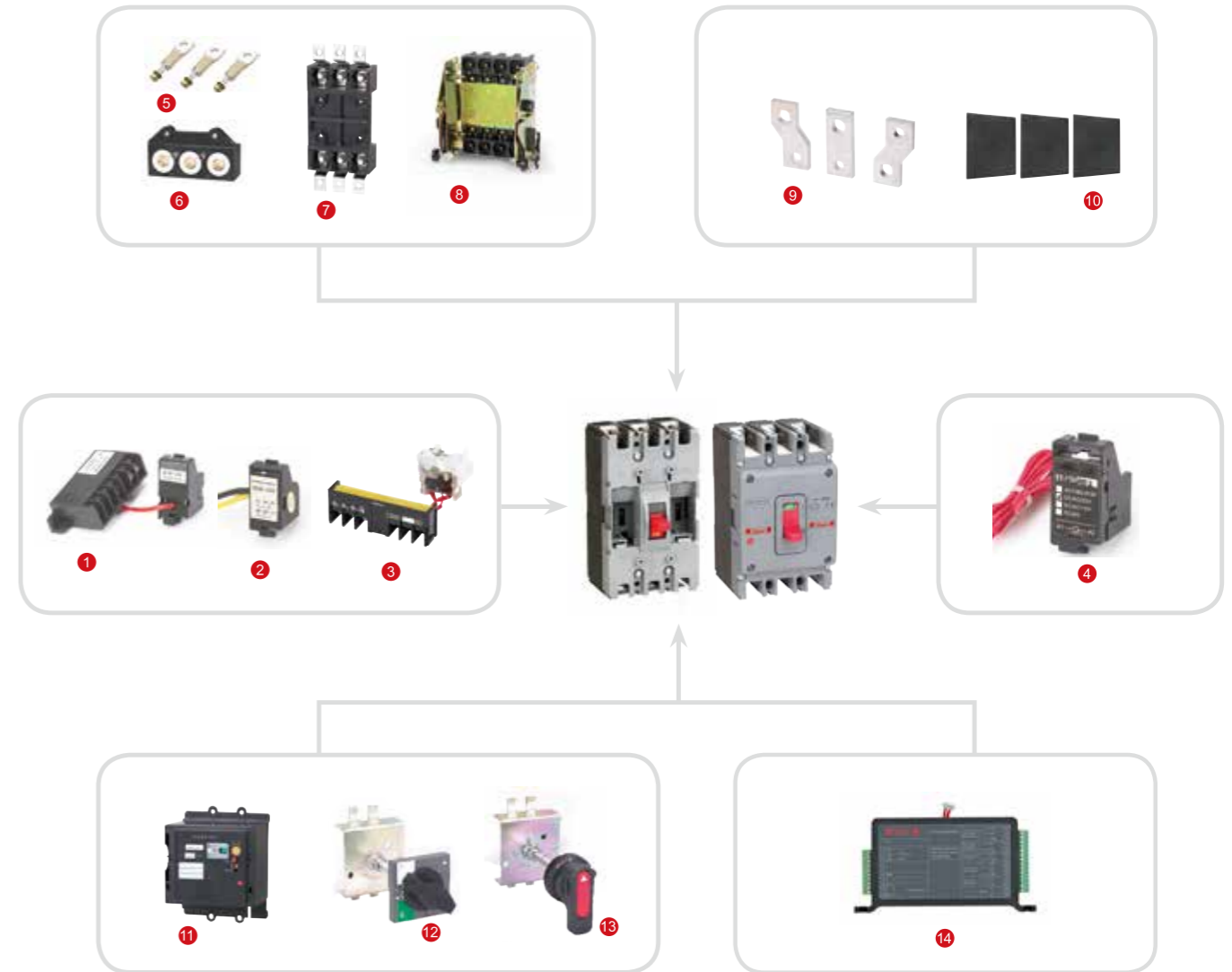
HDM3S MCCB



Accessories

Note: HDM3S Accessories are not compatible with HDM3/HDM3E/HDM3L

Overview of Accessories



- | | | |
|---------------------------|--------------------------------------|-------------------------------------|
| 1 Undervoltage release | 7 Plug-in front connection | 13 Round handle operating mechanism |
| 2 Auxiliary contact | 8 Withdrawable connection | 14 Hand lock |
| 3 Alarm contact | 9 Extension terminal | 15 Terminal cover |
| 4 Shunt release | 10 Interphase barriers | 16 Cage lug |
| 5 Fixed rear connection | 11 Electric operating mechanism | |
| 6 Plug-in rear connection | 12 Square handle operating mechanism | |

Note:

For full information about the accessories. Please go on Himel website to download "MCCB catalogue"

HDM3S MCCB



Accessories Selection Guide

Auxiliary contact with Wire

Frame size	Auxiliary contact with Wire	
	Contact	Left
HDM3S-160	1NC+1NO	HDM3S160OF11L
	2NC+2NO	HDM3S160OF21L
HDM3S-250	1NC+1NO	HDM3S250OF11L
	2NC+2NO	HDM3S250OF21L
HDM3S-400/630	1NC+1NO	HDM3S630OF11L
	2NC+2NO	HDM3S630OF21L



Auxiliary contact with Terminal

Frame size	Auxiliary contact with terminal	
	Contact	Left
HDM3S-160	1NC+1NO	HDM3S160OF12L
	2NC+2NO	HDM3S160OF22L
HDM3S-250	1NC+1NO	HDM3S250OF12L
	2NC+2NO	HDM3S250OF22L
HDM3S-400/630	1NC+1NO	HDM3S630OF12L
	2NC+2NO	HDM3S630OF22L



Alarm contact with Wire

Frame size	Alarm contact Wire	
	Left	
HDM3S-160	HDM3S160AL1L	
HDM3S-250	HDM3S250AL1L	
HDM3S-400/630	HDM3S630AL1L	



Alarm contact with Terminal

Frame size	Alarm contact terminal	
	Left	
HDM3S-160	HDM3S160AL2L	
HDM3S-250	HDM3S250AL2L	
HDM3S-400/630	HDM3S630AL2L	



Auxiliary Alarm with Wire

Frame size	Alarm contact Wire	
	Left	
HDM3S-160	HDM3S160OFAL1L	
HDM3S-250	HDM3S250OFAL1L	
HDM3S-400/630	HDM3S630OFAL1L	



HDM3S MCCB



Auxiliary Alarm with Terminal

Frame size	Alarm contact terminal	
	Left	
HDM3S-160	HDM3S160OFAL2L	
HDM3S-250	HDM3S250OFAL2L	
HDM3S-400/630	HDM3S630OFAL2L	



Shunt release with Wire

Frame size	Shunt release with Wire	
	Voltage	Right
HDM3S-160	AC230V	HDM3S160MX1A2R
	AC400V	HDM3S160MX1A3R
	DC110V	HDM3S160MX1D1R
	DC220V	HDM3S160MX1D2R
	DC24V	HDM3S160MX1D3R
HDM3S-250	AC230V	HDM3S250MX1A2R
	AC400V	HDM3S250MX1A3R
	DC110V	HDM3S250MX1D1R
	DC220V	HDM3S250MX1D2R
	DC24V	HDM3S250MX1D3R
HDM3S-400/630	AC230V	HDM3S630MX1A2R
	AC400V	HDM3S630MX1A3R
	DC110V	HDM3S630MX1D1R
	DC220V	HDM3S630MX1D2R
	DC24V	HDM3S630MX1D3R



Shunt release with Terminal

Frame size	Shunt release with Terminal	
	Voltage	Right
HDM3S-160	AC230V	HDM3S160MX2A2R
	AC400V	HDM3S160MX2A3R
	DC110V	HDM3S160MX2D1R
	DC220V	HDM3S160MX2D2R
	DC24V	HDM3S160MX2D3R
HDM3S-250	AC230V	HDM3S250MX2A2R
	AC400V	HDM3S250MX2A3R
	DC110V	HDM3S250MX2D1R
	DC220V	HDM3S250MX2D2R
	DC24V	HDM3S250MX2D3R
HDM3S-400/630	AC230V	HDM3S630MX2A2R
	AC400V	HDM3S630MX2A3R
	DC110V	HDM3S630MX2D1R
	DC220V	HDM3S630MX2D2R
	DC24V	HDM3S630MX2D3R



HDM3S MCCB



Under voltage release with Terminal

Frame size	Under voltage release with Terminal	
	Voltage	Right
HDM3S-160	AC230V	HDM3S160MN2A2R
	AC400V	HDM3S160MN2A3R
	DC110V	HDM3S160MN2D1R
	DC220V	HDM3S160MN2D2R
	DC24V	HDM3S160MN2D3R
HDM3S-250	AC230V	HDM3S250MN2A2R
	AC400V	HDM3S250MN2A3R
	DC110V	HDM3S250MN2D1R
	DC220V	HDM3S250MN2D2R
HDM3S-400/630	AC230V	HDM3S630MN2A2R
	AC400V	HDM3S630MN2A3R
	DC110V	HDM3S630MN2D1R
	DC220V	HDM3S630MN2D2R
	DC24V	HDM3S630MN2D3R



Plug-in

Frame size	Plug-in		
	Connection type	3P	4P
HDM3S-160	Front connection	HDM3S160PF3	HDM3S160PF4
	Rear connection	HDM3S160PR3	HDM3S160PR4
HDM3S-250	Front connection	HDM3S250PF3	HDM3S250PF4
	Rear connection	HDM3S250PR3	HDM3S250PR4
HDM3S-400/630	Rear connection	HDM3S630PR3	HDM3S630PR4



Draw-out

Frame size	Plug-in		
	Connection type	3P	4P
HDM3S-400	Horizontal connection	HDM3S400DOR3	HDM3S400DOR4
HDM3S-630	Horizontal connection	HDM3S630DOR3	HDM3S630DOR4



Motor

Frame size	Motor				
	AC230V	AC400V	DC110V	DC220V	DC24V
HDM3S-160	HDM3S160MOA2	HDM3S160MOA3	HDM3S160MOD1	HDM3S160MOD2	HDM3S160MOD3
HDM3S-250	HDM3S250MOA2	HDM3S250MOA3	HDM3S250MOD1	HDM3S250MOD2	HDM3S250MOD3
HDM3S-400/630	HDM3S630MOA2	HDM3S630MOA3	HDM3S630MOD1	HDM3S630MOD2	HDM3S630MOD3



HDM3S MCCB



Rotation Handle

Frame size	Rotation Handle		
	Handle shape	Direct	Extended (Default 150mm)
HDM3S-160	Round	HDM3S160H1	HDM3S160HL1
	Square	HDM3S160H2	HDM3S160HL2
HDM3S-250	Round	HDM3S250H1	HDM3S250HL1
	Square	HDM3S250H2	HDM3S250HL2
HDM3S-400/630	Round	HDM3S630H1	HDM3S630HL1
	Square	HDM3S630H2	HDM3S630HL2



Rear connection

Frame size	Rear connection	
	3P(6pcs)	4P(8pcs)
HDM3S-160	HDM3S160RC3	HDM3S160RC4
HDM3S-250	HDM3S250RC3	HDM3S250RC4
HDM3S-400/630	HDM3S630RC3	HDM3S630RC4



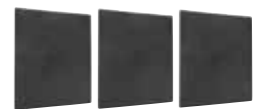
Expanding terminal

Frame size	Expanding terminal	
	3P(3pcs)	4P(4pcs)
HDM3S-160	HDM3S160C3	HDM3S160C4
HDM3S-250	HDM3S250C3	HDM3S250C4
HDM3S-400/630	HDM3S630C3	HDM3S630C4



Interphase barriers

Frame size	Interphase barriers	
	3P(2pcs)	4P(3pcs)
HDM3S-160	HDM3S160IB3	HDM3S160IB4
HDM3S-250	HDM3S250IB3	HDM3S250IB4
HDM3S-400/630	HDM3S630IB3	HDM3S630IB4



Cage lug

Frame size	Cage lug
	Normal(1pcs)
HDM3S-160	HDM3S160LUG
HDM3S-250	HDM3S250LUG
HDM3S-400	HDM3S400LUG
HDM3S-630	HDM3S630LUG



HDM2 MCCB



Range Presentation

HDM2 is Himel range of 1P/2P MCCB , rated current 10A to 125A, rated Voltage 220V/240V, 400V, suitable for AC 50/60Hz and mainly used in the Power distribution system, to provide protection against overload and short circuit.

Features

- ◆ Rated current 10A to 125A
- ◆ Icu/Ics certified
1P: Icu/Ics=20/15kA@220/240V
2P: Icu/Ics=30/18kA@220/240V
Icu/Ics=20/15kA@400V
- ◆ Thermal trip calibrated under 40°C and 50°C , suitable for Higher ambient temperature

Online Content



HDM2

Selection Code

Range name	Frame size	Breaking capacity	Rated current	Poles	Temperature
HDM2	125	L	100	1	
HDM2	125: 125AF	L	010: 10A 016: 16A ... 100: 100A 125: 125A	1: 1P 2: 2P	Default: 40°C T: 50°C

Note: "T" is thermal trip calibrated in 50 degree. please contact with HIMEL local office, if you required

Technical Parameters		HDM2-125	
MCCB			
Rated voltage Ue(V)	1P: 220/240VAC; 2P: 400VAC		
Rated frequency (Hz)	50/60Hz		
Rated insulation voltage Ui(V)	690V		
Rated impulse withstand voltage uimp(kV)	8kV		
Rated current In(A)	10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A, 80A, 100A,125A		
Utilization category	A		
Reference temperature	40°C		
Number of Poles	1P	2P	
Icu(kA)	220/240VAC	20	30
Ics(kA)	220/240VAC	15	18
Icu(kA)	400VAC	/	20
Ics(kA)	400VAC	/	15
Mechanical life	9000		
Electrical life	2000		
Isolation function	Available		
Certification	SEMKO		

HDM2L Earth-leakage Circuit Breaker



Range Presentation

HDM2L is himel range of 2P ELCB with thermal magnetic trip unit and residual operating current protection, providing line protection, up to 250A

Features

- ◆ 125AF & 250AF , 2P, 2 frame size
- ◆ Rated current 16A to 250A
- ◆ Adjustable residual current protection
- ◆ Adjustable time delay with residual current protection

Selection Code

Series Name	Frame Size	Breaking Capacity	Rated Current	Poles	Leakage current	Leakage current	Time delay
HDM2L	125	S	100	2	3C	C	1
HDM2L	125: 125A (16-125A) 250: 250AF (100-125A)	S	016:16A 020:20A 025:25A 032:32A 040:40A 050:50A 063:63A 080:80A 100:100A 125:125A 160:160A 180:180A 200:200A 225:225A 250:250A	2: 2P	3C: thermal -Magnet with line protection, N pole with switch and protection	A: 30/100/300mA B: 100/300/500mA C: OFF/100/300mA	0: No delay 1: 0.1/0.2/0.3s

Technical Parameters		
Frame size	HDM3L-125	HDM3L-250
[Ue] rated operational voltage (V)	230	230
[In]Current (A)	16/20/25/32/40/50/63/80/100/125	100/125/140/160/180/200/225/250
[Ui] rated insulation voltage (V)	800	800
[Uimp] rated impulse withstand voltage (Kv)	8	8
Pole	2	2
Breaking Capacity (Ka)	S	S
Icu (230V)	35	35
Ics (230V)	21	21
Rated residual operating current I _{Δn} (mA)	A:30/100/300mA B:100/300/500mA C: OFF/100/300mA	A:30/100/300mA B:100/300/500mA C: OFF/100/300mA
Adjustable time delay	B:100/300/500mA	B:100/300/500mA
rated residual non-operating current I _{Δn} (mA)	50% I _{Δn}	50% I _{Δn}
Non time delay: tripping time (s)	≤0.1	≤0.1
Adjustable time delay: 2I _{Δn} non tripping time (s)	Y1: 0.1/0.2/0.3s	Y1: 0.1/0.2/0.3s
Rated residual short-circuit connection capacity I _{Δm} (kA)	25% Icu	25% Icu
Mechanical Life	10000	10000
Electrical Life	4000	4000
Utilisation category	Category A	
Trip unit technology	Thermal-magnetic (Fixed) , line protection (10xIn,400A below In=40A)	
Suitability for isolation	■	
IP degree of protection	IP20 conforming to IEC 60529	
Ambient air temperature for operation	upto...40 °C	
Certificates	IEC60947-2 TUV/CB	
Dimension (WxHxD)	62*150*72	75*165*74

HDW3 Air Circuit Breakers

Standard: IEC IEC60947-2



Range Presentation

HDW3 is Himel 3 series comprehensive range of Air Circuit Breakers designed to distribute electric energy and protect overload, under voltage, short circuit and ground faults

HDW3 can be mainly used in power stations, factories, mines and modern high-rise buildings with smart power distribution system.

Application standard: IEC/EN 60947-2

Features

- ◆ 5 frame sizes: 1600, 2000, 3200, 4000, 6300A
- ◆ Rated current In (A): 400 - 6300
- ◆ Rated voltage AC Ue (V): 400/415, 660/690
- ◆ Poles: 3 & 4
- ◆ 3 type of intelligent controllers

Online Content



HDW3

Selection code

Range name	Frame size	Breaking capacity	Rated current	Poles	Installation type
HDW3	16	M	16	3	FH
HDW3	16: 1600 20: 2000 32: 3200 40: 4000 63: 6300	M: Icu≠Ics≠Icw S: Icu=Ics=Icw	04: 400A 06: 630A 08: 800A 10: 1000A 12: 1250A 16: 1600A 20: 2000A 25: 2500A 32: 3200A 40: 4000A 50: 5000A 63: 6300A(only 3P)	3: 3P 4: 4P	DH: Draw-out horizontal (1600AF~6300AF) FH: Fixed horizontal (1600AF~4000AF)
Motor mechanism (MCH)+Closing coil (XF)	Shunt release (MX)	Undervoltage release(MN)	Auxiliary contact	Intelligent controller	
5	5	5	4	M	
D: DC220V N: AC230V V: AC400V 5: Without MCH+XF	D: DC220V N: AC230V V: AC400V 5: Without shunt release	N: AC230V V: AC400V P: with undervoltage delayed AC230V T: with undervoltage delayed AC400V 5: Without undervoltage release	4: NO+4NC 6: 6NO+6NC	L: iTR326(50Hz) M: iTR326A(50Hz) H: iTR326H((50/60Hz) E: iTR326(60Hz) T: iTR326A(60Hz)	

Example: HDW316M163FH5554M: HDW3-1600M 1600A 3P Fixed breaker, M type controller, without accessory.

HDW3 Air Circuit Breakers

Standard: IEC/EN IEC60947-2



Technical Parameters											
Air Circuit Breakers		HDW3									
Frame size		1600M	1600S	2000M	2000S	3200M	3200S	4000M	4000S	6300M	6300S
Rated current		400, 630, 800, 1000, 1250, 1600		630, 800, 1000, 1250, 1600, 2000		2000, 2500, 3200		1600, 2000, 2500, 3200, 4000		4000, 5000, 6300 (3P only)	
Breaking capacity											
Icu(kA)	400/415V	50	42	80	65	80	65	100	85	120	85
	660/690V	35	35	50	40	65	50	65	65	85	75
Ics(kA)	400/415V	42	42	65	65	65	65	85	85	100	85
	660/690V	35	35	40	40	50	50	65	65	75	75
Icw(kA)	400/415V	42	42	65	65	65	65	85	85	85	85
	660/690V	35	35	40	40	50	50	65	65	75	75
Mechanical life	Without maintenance	12500		15000		10000		10000		2500	
	With maintenance	25000		30000		20000		20000		5000	
Electrical life	400/415V	6000		6500		5000		5000		800	
	690V	4000		4000		3000		3000		500	
Dimension(mm)H*W*D											
Draw-out	3P	322*288*330		436*405*425		436*465*425		439*441*428.6		441.5*815*508	
	4P	322*358*330		436*500*425		436*580*425		439*556*428.6		441.5*930*508	
Fixed	3P	310*276*229		397*364*327		397*428*327		352*422*329.5		/	
	4P	310*346*229		397*459*327		397*543*327		352*537*329.5		/	
Weight(KG)											
Draw-out type	3P	34		73.8		93.8		78		233	
	4P	41		85.5		115		95		271.8	
Fixed type	3P	14		41.4		53.4		42		/	
	4P	17		52		68		52		/	
Tripping time											
Tripping time with arc extinguishing						≤25ms					
Closing time						≤70ms					