

3SM29

Independent power supply with build-in power source, directly draws power from the incoming end to avoid the risk of protection function failure caused by supply failure.

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)82-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Уда (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

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1. Body
2. Plug-in base
3. Electronic release
4. Drawer type base
5. Rotary manual operating handle
6. Motor driven operating mechanism
7. Shunt release
8. Under voltage release
9. Alarm contact
10. Auxiliary contact
11. Rear connection plate
12. Front connection plate
13. Cage clamp terminal



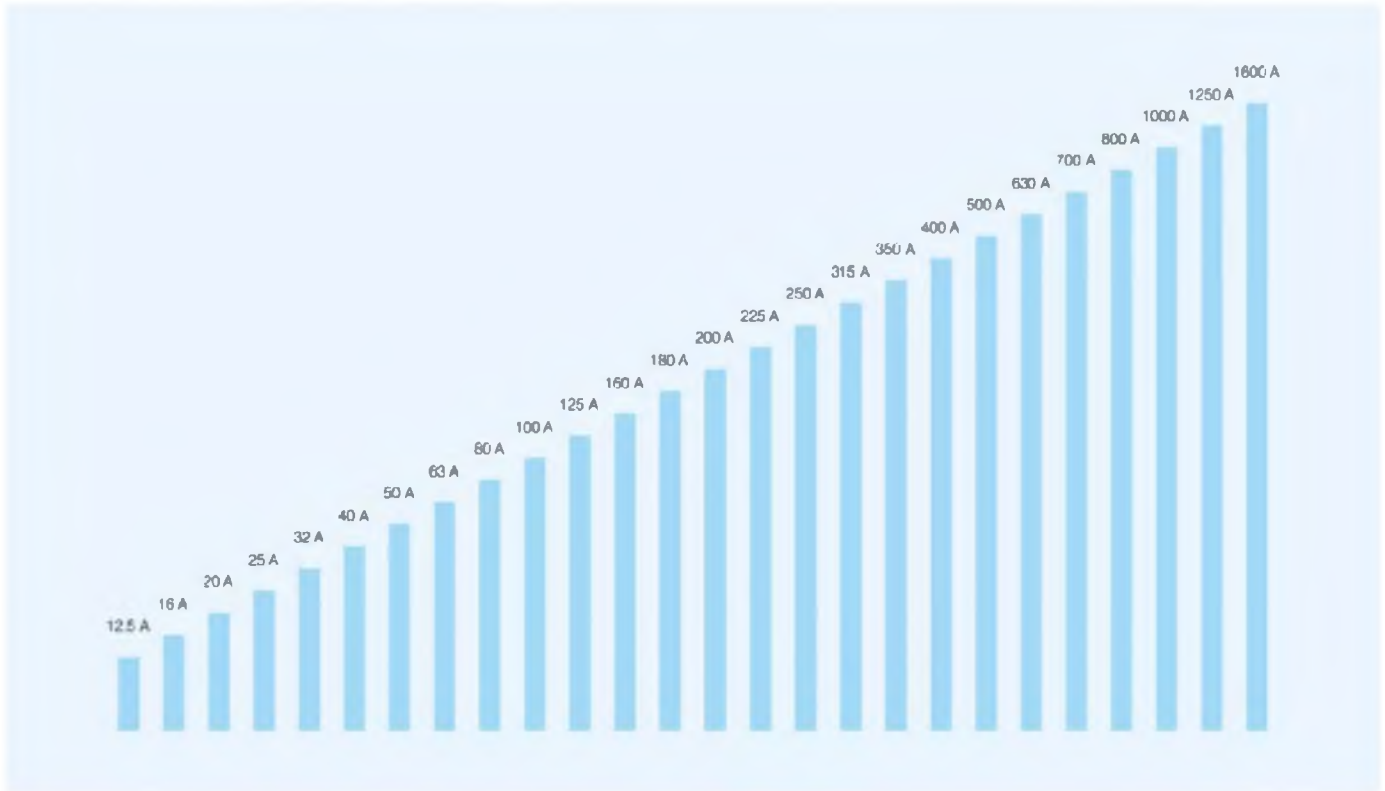
Applications and functions

- Incoming and outgoing function in distribution systems
- Switching and protection of short circuit and overload for motors, transformers and capacitors

- Stopping and switching off in an emergency in conjunction with lockable rotary operating mechanisms and terminal covers
- Available in the following versions:
- System protection: the overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads
- Motor protection: the overload and short-circuit releases are designed for optimized protection and direct-on-line starting of induction squirrel-cage motors

Features

- Complete current range



- High-breaking capacity
 - (1) B: Basic breaking capacity type
 - (2) N: Normal breaking capacity type (3) S: Standard breaking capacity type (4) H: High-breaking capacity type
 - (5) G: Ultrahigh breaking capacity type

Frame rated current	Rated ultimate short circuit breaking capacity I _{cu}				
	20kA	35kA	50kA	65kA	85kA
A: 125 A		N			
B: 160 A	B	N	S		L
C: 250 A	B	N	S	H	L
D: 400 A		N	S	H	L
E: 630 A		N	S	H	L
F: 800 A		N	S	H	
G: 1250 A			S	H	G
H: 1600 A			S	H	G

- Microprocess controlled
- 3SM29 series circuit breaker (I_{nm} ≥ 250) adopt advanced microprocess electronic release that can intelligitize the protection

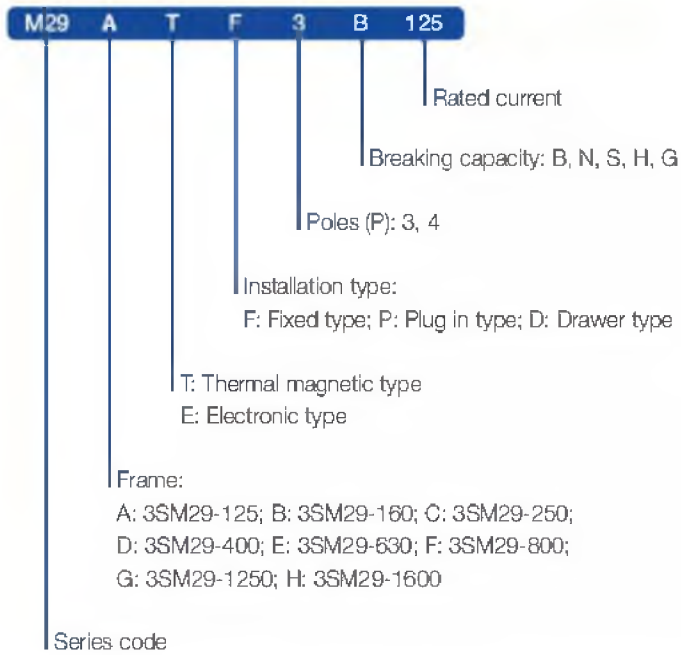
- Convenient installation

3SM29 series circuit breaker provides three installation types as follow: Fixed installation with front connection and rear connection

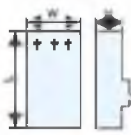
Plug-in installation with front connection and rear connection

Drawer installation

Instruction of type code



Technical specifications

Type	3SM29-125		3SM29-160			3SM29-250			3SM29-400			3SM29-630, 3SM29-800			3SM29-1250, 3SM29-1600			
Standards	IEC 60947-2		IEC 60947-2			IEC 60947-2			IEC 60947-2			IEC 60947-2			IEC 60947-2			
Frame type	A		B			C			D			E, F			G, H			
Poles (No)	3, 4		3, 4			3, 4			3, 4			3, 4			3			
N-pole rated current	= In		= In			= In			= In			= In			= In			
Frame Current Inm (A)	125		160			250			400			630, 800			1250, 1600			
Rated current In (A)	12.5, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125		32, 40, 50, 63, 80, 100, 125, 160			125, 160, 180, 200, 225, 250			250, 315, 350, 400			400, 500, 630, 700, 800			800, 1000, 1250, 1600			
Rated insulating voltage Ui (V)	500		690			690			690			690			690			
Rated service voltage Ue (V)	400		400			400			400			400			400			
Rated frequency in AC (Hz)	50/60		50/60			50/60			50/60			50/60			50/60			
Rated impulse withstand voltage Uimp (Kv)	6		6			8			8			8			8			
Class of breaking capacity	B N		B N S			N S H			N S H			N S H			S H G			
Rated ultimate short-circuit breaking capacity, Icu (kA)	-																	
(AC) 50-60 Hz 400V O-CO (kA)	20	35	20	35	50	35	50	65	35	50	65	35	50	65	50	65	85	
(AC) 50-60 Hz 690V O-CO-CO	15	20	16	25	35	20	30	35	20	30	35	20	30	35	30	35	50	
Rated operating short-circuit breaking capacity, Ics	-																	
(AC) 50-60 Hz 400V O-CO-CO (kA)	10	17.5	10	17.5	25	35	37.5	48.8	35	37.5	48.8	35	37.5	48.8	50	48.75	50	
(AC) 50-60 Hz 690V O-CO-CO (kA)	-	-	5	10	15	20	30	35	20	30	35	20	35	30	35	35	35	
Rated short-time withstand current for 1s (kA)	-		-			-			5			10			20			
Mechanical life (times)	8500		7000			7000			4000			4000			2500			
Electrical life (times)	1500		1000			1000			1000			1000			500			
Flashover distance (mm)	≤ 30		≤ 30			≤ 50			≤ 50			≤ 80			≤ 80			
Thermal magnetic release	■		■			■			■			■			■			
Electronic release	-		-			■			■			■			■			
Utilization category (IEC 60947-2)	A		A			A			A, B			A, B			A, B			
Motor control mechanism	■		■			■			■			■			■			
Rotary handle operation mechanism	■		■			■			■			■			■			
Shunt and under voltage release	■		■			■			■			■			■			
Auxiliary contact and alarm contact	■		■			■			■			■			■			
 Dimension	W (mm)	3P	76	90		105			140			210			210			
		4P	101	120		140			184			280			280			
	L (mm)	3P	120	120		170			254			268			406			
		4P	120	120		170			254			268			406			
	H (mm)	3P	70	70		103.5			103.5			103.5			138.5			
		4P	70	70		103.5			103.5			103.5			138.5			
Weight	Fixed	3P/4P	0.92/1.3	1.2/1.6		2.7/3.5			5.1/7			9.6/12.2			17.2/22.2			
	Plug in	3P/4P	1.2/1.5	1.4/1.8		3.2/4.2			6.2/8.5			-			-			
	Withdrawable	3P/4P	*	*		3.6/4.6			6.5/8.7			12.2/15.3			22/30.1			
Ambient temperature	-5 ~ 40 °C, max. 95 % humidity																	
Storage temperature	-40 ~ +75 °C																	
Altitude (Max)	2,000																	

Selection and ordering data

Thermal Magnetic Type

	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type		
				Type code	Order code	Type code	Order code	Type code	Order code	
3SM29-125	20 kA (B)	3	12.5	M29ATF 3B12.5	10484	M29ATP 3B12.5	10506	-	-	
			16	M29ATF 3B16	10485	M29ATP 3B16	10507	-	-	
			20	M29ATF 3B20	10486	M29ATP 3B20	10508	-	-	
			25	M29ATF 3B25	10487	M29ATP 3B25	10509	-	-	
			32	M29ATF 3B32	10488	M29ATP 3B32	10510	-	-	
			40	M29ATF 3B40	10489	M29ATP 3B40	10511	-	-	
			50	M29ATF 3B50	10490	M29ATP 3B50	10512	-	-	
			63	M29ATF 3B63	10491	M29ATP 3B63	10513	-	-	
			80	M29ATF 3B80	10492	M29ATP 3B80	10514	-	-	
			100	M29ATF 3B100	10493	M29ATP 3B100	10515	-	-	
			125	M29ATF 3B125	10494	M29ATP 3B125	10516	-	-	
			4	12.5	M29ATF 4B12.5	10528	M29ATP 4B12.5	10550	-	-
		16		M29ATF 4B16	10529	M29ATP 4B16	10551	-	-	
		20		M29ATF 4B20	10530	M29ATP 4B20	10552	-	-	
		25		M29ATF 4B25	10531	M29ATP 4B25	10553	-	-	
		32		M29ATF 4B32	10532	M29ATP 4B32	10554	-	-	
		40		M29ATF 4B40	10533	M29ATP 4B40	10555	-	-	
		50		M29ATF 4B50	10534	M29ATP 4B50	10556	-	-	
		63		M29ATF 4B63	10535	M29ATP 4B63	10557	-	-	
		35 kA (N)	3	12.5	M29ATF 3N12.5	10495	M29ATP 3N12.5	10517	-	-
	16			M29ATF 3N16	10496	M29ATP 3N16	10518	-	-	
	20			M29ATF 3N20	10497	M29ATP 3N20	10519	-	-	
	25			M29ATF 3N25	10498	M29ATP 3N25	10520	-	-	
	32			M29ATF 3N32	10499	M29ATP 3N32	10521	-	-	
	40			M29ATF 3N40	10500	M29ATP 3N40	10522	-	-	
	50			M29ATF 3N50	10501	M29ATP 3N50	10523	-	-	
	63			M29ATF 3N63	10502	M29ATP 3N63	10524	-	-	
	80			M29ATF 3N80	10503	M29ATP 3N80	10525	-	-	
	100			M29ATF 3N100	10504	M29ATP 3N100	10526	-	-	
	125			M29ATF 3N125	10505	M29ATP 3N125	10527	-	-	
	4			12.5	M29ATF 4N12.5	10539	M29ATP 4N12.5	10561	-	-
			16	M29ATF 4N16	10540	M29ATP 4N16	10562	-	-	
			20	M29ATF 4N20	10541	M29ATP 4N20	10563	-	-	
			25	M29ATF 4N25	10542	M29ATP 4N25	10564	-	-	
			32	M29ATF 4N32	10543	M29ATP 4N32	10565	-	-	
			40	M29ATF 4N40	10544	M29ATP 4N40	10566	-	-	
			50	M29ATF 4N50	10545	M29ATP 4N50	10567	-	-	
			63	M29ATF 4N63	10546	M29ATP 4N63	10568	-	-	
	3SM29-160		20 kA (B)	3	32	M29BTF 3B32	10572	M29BTP 3B32	34331	-
		40			M29BTF 3B40	10573	M29BTP 3B40	34332	-	-
50		M29BTF 3B50			10574	M29BTP 3B50	34333	-	-	
63		M29BTF 3B63			10575	M29BTP 3B63	34334	-	-	
80		M29BTF 3B80			10576	M29BTP 3B80	34335	-	-	
100		M29BTF 3B100			10577	M29BTP 3B100	34336	-	-	
125		M29BTF 3B125			10578	M29BTP 3B125	34337	-	-	
160		M29BTF 3B160			10579	M29BTP 3B160	34338	-	-	
4		32	M29BTF 4B32	34339	M29BTP 4B32	34347	-	-		
		40	M29BTF 4B40	34340	M29BTP 4B40	34348	-	-		
		50	M29BTF 4B50	34341	M29BTP 4B50	34349	-	-		
		63	M29BTF 4B63	34342	M29BTP 4B63	34350	-	-		
		80	M29BTF 4B80	34343	M29BTP 4B80	34351	-	-		
		100	M29BTF 4B100	34344	M29BTP 4B100	34352	-	-		
		125	M29BTF 4B125	34345	M29BTP 4B125	34353	-	-		
		160	M29BTF 4B160	34346	M29BTP 4B160	34354	-	-		




3SM29-160	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type		
				Type code	Order code	Type code	Order code	Type code	Order code	
3SM29-160	35 kA (N)	3	32	M29BTF 3N32	10580	M29BTP 3N32	39925	-	-	
			40	M29BTF 3N40	10581	M29BTP 3N40	39926	-	-	
			50	M29BTF 3N50	10582	M29BTP 3N50	39927	-	-	
			63	M29BTF 3N63	10583	M29BTP 3N63	39928	-	-	
			80	M29BTF 3N80	10584	M29BTP 3N80	39929	-	-	
			100	M29BTF 3N100	10585	M29BTP 3N100	39930	-	-	
			125	M29BTF 3N125	10586	M29BTP 3N125	39931	-	-	
		160	M29BTF 3N160	10587	M29BTP 3N160	39932	-	-		
		4	32	M29BTF 4N32	10604	M29BTP 4N32	10612	-	-	
			40	M29BTF 4N40	10605	M29BTP 4N40	10613	-	-	
			50	M29BTF 4N50	10606	M29BTP 4N50	10614	-	-	
			63	M29BTF 4N63	10607	M29BTP 4N63	10615	-	-	
			80	M29BTF 4N80	10608	M29BTP 4N80	10616	-	-	
			100	M29BTF 4N100	10609	M29BTP 4N100	10617	-	-	
	125		M29BTF 4N125	10610	M29BTP 4N125	10618	-	-		
	50 kA (S)	3	32	M29BTF 3S32	10588	M29BTP 3S32	10596	-	-	
			40	M29BTF 3S40	10589	M29BTP 3S40	10597	-	-	
			50	M29BTF 3S50	10590	M29BTP 3S50	10598	-	-	
			63	M29BTF 3S63	10591	M29BTP 3S63	10599	-	-	
			80	M29BTF 3S80	10592	M29BTP 3S80	10600	-	-	
			100	M29BTF 3S100	10593	M29BTP 3S100	10601	-	-	
			125	M29BTF 3S125	10594	M29BTP 3S125	10602	-	-	
		160	M29BTF 3S160	10595	M29BTP 3S160	10603	-	-		
		4	32	M29BTF 4S32	39933	M29BTP 4S32	10620	-	-	
			40	M29BTF 4S40	39934	M29BTP 4S40	10621	-	-	
			50	M29BTF 4S50	39935	M29BTP 4S50	10622	-	-	
			63	M29BTF 4S63	39936	M29BTP 4S63	10623	-	-	
			80	M29BTF 4S80	39937	M29BTP 4S80	10624	-	-	
100			M29BTF 4S100	39938	M29BTP 4S100	10625	-	-		
125	M29BTF 4S125		39939	M29BTP 4S125	10626	-	-			
160	M29BTF 4S160	39940	M29BTP 4S160	10627	-	-				
3SM29-250	35 kA (N)	3	125	M29CTF 3N125	39941	M29CTP 3N125	10638	M29CTD 3N125	10656	
			160	M29CTF 3N160	39942	M29CTP 3N160	10639	M29CTD 3N160	10657	
			180	M29CTF 3N180	39943	M29CTP 3N180	10640	M29CTD 3N180	10658	
			200	M29CTF 3N200	39944	M29CTP 3N200	10641	M29CTD 3N200	10659	
			225	M29CTF 3N225	39945	M29CTP 3N225	10642	M29CTD 3N225	10660	
			250	M29CTF 3N250	39946	M29CTP 3N250	10643	M29CTD 3N250	10661	
			4	125	M29CTF 4N125	10674	M29CTP 4N125	10692	M29CTD 4N125	16011
		160		M29CTF 4N160	10675	M29CTP 4N160	10693	M29CTD 4N160	16012	
		180		M29CTF 4N180	10676	M29CTP 4N180	10694	M29CTD 4N180	16013	
		200		M29CTF 4N200	10677	M29CTP 4N200	10695	M29CTD 4N200	16014	
		225		M29CTF 4N225	10678	M29CTP 4N225	10696	M29CTD 4N225	16015	
		250		M29CTF 4N250	10679	M29CTP 4N250	10697	M29CTD 4N250	16016	
		50 kA (S)		3	125	M29CTF 3S125	39947	M29CTP 3S125	10644	M29CTD 3S125
			160		M29CTF 3S160	39948	M29CTP 3S160	10645	M29CTD 3S160	10663
	180		M29CTF 3S180		10628	M29CTP 3S180	10646	M29CTD 3S180	10664	
	200		M29CTF 3S200		10629	M29CTP 3S200	10647	M29CTD 3S200	10665	
	225		M29CTF 3S225		10630	M29CTP 3S225	10648	M29CTD 3S225	10666	
	250		M29CTF 3S250		10631	M29CTP 3S250	10649	M29CTD 3S250	10667	
	4		125		M29CTF 4S125	10680	M29CTP 4S125	10698	M29CTD 4S125	16017
			160	M29CTF 4S160	10681	M29CTP 4S160	10699	M29CTD 4S160	16018	
			180	M29CTF 4S180	10682	M29CTP 4S180	10700	M29CTD 4S180	16019	
			200	M29CTF 4S200	10683	M29CTP 4S200	16002	M29CTD 4S200	16020	
			225	M29CTF 4S225	10684	M29CTP 4S225	16003	M29CTD 4S225	16021	
			250	M29CTF 4S250	10685	M29CTP 4S250	16004	M29CTD 4S250	16022	





Selection and ordering data



Thermal Magnetic Type

3SM29-800	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type		
				Type code	Order code	Type code	Order code	Type code	Order code	
	35 kA (N)	3	400	M29FTF 3N400	34229	-	-	M29FTD 3N400	34244	
			500	M29FTF 3N500	34230	-	-	M29FTD 3N500	34245	
			630	M29FTF 3N630	34231	-	-	M29FTD 3N630	34246	
			700	M29FTF 3N700	34232	-	-	M29FTD 3N700	34247	
			800	M29FTF 3N800	34233	-	-	M29FTD 3N800	34248	
			4	400	M29FTF 4N400	34259	-	-	M29FTD 4N400	34274
		500	M29FTF 4N500	34260	-	-	M29FTD 4N500	34275		
		630	M29FTF 4N630	34261	-	-	M29FTD 4N630	34276		
		700	M29FTF 4N700	34262	-	-	M29FTD 4N700	34277		
		800	M29FTF 4N800	34263	-	-	M29FTD 4N800	34278		
		50 kA (S)	3	400	M29FTF 3S400	34234	-	-	M29FTD 3S400	34249
				500	M29FTF 3S500	34235	-	-	M29FTD 3S500	34250
	630			M29FTF 3S630	34236	-	-	M29FTD 3S630	34251	
	700			M29FTF 3S700	34237	-	-	M29FTD 3S700	34252	
	800			M29FTF 3S800	34238	-	-	M29FTD 3S800	34253	
	4			400	M29FTF 4S400	34264	-	-	M29FTD 4S400	34279
	500		M29FTF 4S500	34265	-	-	M29FTD 4S500	34280		
	630		M29FTF 4S630	34266	-	-	M29FTD 4S630	34281		
	700		M29FTF 4S700	34267	-	-	M29FTD 4S700	34282		
	800		M29FTF 4S800	34268	-	-	M29FTD 4S800	34283		
	65 kA (H)		3	400	M29FTF 3H400	34239	-	-	M29FTD 3H400	34254
				500	M29FTF 3H500	34240	-	-	M29FTD 3H500	34255
		630		M29FTF 3H630	34241	-	-	M29FTD 3H630	34256	
		700		M29FTF 3H700	34242	-	-	M29FTD 3H700	34257	
800		M29FTF 3H800		34243	-	-	M29FTD 3H800	34258		
4		400		M29FTF 4H400	34269	-	-	M29FTD 4H400	34284	
500		M29FTF 4H500	34270	-	-	M29FTD 4H500	34285			
630		M29FTF 4H630	34271	-	-	M29FTD 4H630	34286			
700		M29FTF 4H700	34272	-	-	M29FTD 4H700	34287			
800		M29FTF 4H800	34273	-	-	M29FTD 4H800	34288			


Electronic Type

	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type			
				Type code	Order code	Type code	Order code	Type code	Order code		
3SM29-250 	35 kA (N)	3	125	M29CEF 3N125	34139	M29CEP 3N125	34145	M29CED 3N125	34151		
			160	M29CEF 3N160	34140	M29CEP 3N160	34146	M29CED 3N160	34152		
			180	M29CEF 3N180	34141	M29CEP 3N180	34147	M29CED 3N180	34153		
			200	M29CEF 3N200	34142	M29CEP 3N200	34148	M29CED 3N200	34154		
			225	M29CEF 3N225	34143	M29CEP 3N225	34149	M29CED 3N225	34155		
			250	M29CEF 3N250	34144	M29CEP 3N250	34150	M29CED 3N250	34156		
		4	125	M29CEF 4N125	34193	-	-	-	-		
			160	M29CEF 4N160	34194	-	-	-	-		
			180	M29CEF 4N180	34195	-	-	-	-		
			200	M29CEF 4N200	34196	-	-	-	-		
			225	M29CEF 4N225	34197	-	-	-	-		
			250	M29CEF 4N250	34198	-	-	-	-		
			50 kA (S)	3	125	M29CEF 3S125	34199	M29CEP 3S125	34205	M29CED 3S125	36229
					160	M29CEF 3S160	34200	M29CEP 3S160	34206	M29CED 3S160	36230
					180	M29CEF 3S180	34201	M29CEP 3S180	34207	M29CED 3S180	36231
	200	M29CEF 3S200			34202	M29CEP 3S200	34208	M29CED 3S200	36232		
	225	M29CEF 3S225			34203	M29CEP 3S225	34209	M29CED 3S225	36233		
	250	M29CEF 3S250			34204	M29CEP 3S250	34210	M29CED 3S250	36234		
	4	125		M29CEF 4S125	36235	-	-	-	-		
		160		M29CEF 4S160	36236	-	-	-	-		
		180		M29CEF 4S180	36237	-	-	-	-		
		200	M29CEF 4S200	36238	-	-	-	-			
		225	M29CEF 4S225	36239	-	-	-	-			
		250	M29CEF 4S250	36240	-	-	-	-			
		65 kA (H)	3	125	M29CEF 3H125	36241	M29CEP 3H125	36247	M29CED 3H125	36253	
				160	M29CEF 3H160	36242	M29CEP 3H160	36248	M29CED 3H160	36254	
				180	M29CEF 3H180	36243	M29CEP 3H180	36249	M29CED 3H180	36255	
	200			M29CEF 3H200	36244	M29CEP 3H200	36250	M29CED 3H200	36256		
	225			M29CEF 3H225	36245	M29CEP 3H225	36251	M29CED 3H225	36257		
	250			M29CEF 3H250	36246	M29CEP 3H250	36252	M29CED 3H250	36258		
4	125		M29CEF 4H125	36259	-	-	-	-			
	160		M29CEF 4H160	36260	-	-	-	-			
	180		M29CEF 4H180	36261	-	-	-	-			
	200		M29CEF 4H200	36262	-	-	-	-			
	225		M29CEF 4H225	36263	-	-	-	-			
	250		M29CEF 4H250	36264	-	-	-	-			
	3SM29-400 		35 kA (N)	3	250	M29DEF 3N250	36289	M29DEP 3N250	36293	M29DED 3N250	36297
					315	M29DEF 3N315	36290	M29DEP 3N315	36294	M29DED 3N315	36298
					350	M29DEF 3N350	36291	M29DEP 3N350	36295	M29DED 3N350	36299
400		M29DEF 3N400			36292	M29DEP 3N400	36296	M29DED 3N400	36300		
4		250			M29DEF 4N250	36301	-	-	-	-	
		315			M29DEF 4N315	36302	-	-	-	-	
		350		M29DEF 4N350	36303	-	-	-	-		
		400		M29DEF 4N400	36304	-	-	-	-		
		50 kA (S)		3	250	M29DEF 3S250	36305	M29DEP 3S250	36309	M29DED 3S250	36313
					315	M29DEF 3S315	36306	M29DEP 3S315	36310	M29DED 3S315	36314
350					M29DEF 3S350	36307	M29DEP 3S350	36311	M29DED 3S350	36315	
400					M29DEF 3S400	36308	M29DEP 3S400	36312	M29DED 3S400	36316	
4			250		M29DEF 4S250	36317	-	-	-	-	
			315		M29DEF 4S315	36318	-	-	-	-	
			350	M29DEF 4S350	36319	-	-	-	-		
			400	M29DEF 4S400	36320	-	-	-	-		
			65 kA (H)	3	250	M29DEF 3H250	36321	M29DEP 3H250	36325	M29DED 3H250	36329
					315	M29DEF 3H315	36322	M29DEP 3H315	36326	M29DED 3H315	36330
350					M29DEF 3H350	36323	M29DEP 3H350	36327	M29DED 3H350	36331	
400					M29DEF 3H400	36324	M29DEP 3H400	36328	M29DED 3H400	36332	
4		250			M29DEF 4H250	36333	-	-	-	-	
		315			M29DEF 4H315	36334	-	-	-	-	
		350		M29DEF 4H350	36335	-	-	-	-		
		400		M29DEF 4H400	36336	-	-	-	-		

Electronic Type

	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type		
				Type code	Order code	Type code	Order code	Type code	Order code	
3SM29-630 	35 kA (N)	3	400	M29EEF 3N400	36340	-	-	M29EED 3N400	36346	
			500	M29EEF 3N500	36341	-	-	M29EED 3N500	36347	
			630	M29EEF 3N630	36342	-	-	M29EED 3N630	36348	
		4	400	M29EEF 4N400	36352	-	-	-	-	
			500	M29EEF 4N500	36353	-	-	-	-	
			630	M29EEF 4N630	36354	-	-	-	-	
	50 kA (S)	3	400	M29EEF 3S400	36358	-	-	M29EED 3S400	36364	
			500	M29EEF 3S500	36359	-	-	M29EED 3S500	36365	
			630	M29EEF 3S630	36360	-	-	M29EED 3S630	36366	
		4	400	M29EEF 4S400	36370	-	-	-	-	
			500	M29EEF 4S500	36371	-	-	-	-	
			630	M29EEF 4S630	36372	-	-	-	-	
	65 kA (H)	3	400	M29EEF 3H400	36376	-	-	M29EED 3H400	36382	
			500	M29EEF 3H500	36377	-	-	M29EED 3H500	36383	
			630	M29EEF 3H630	36378	-	-	M29EED 3H630	36384	
		4	400	M29EEF 4H400	36388	-	-	-	-	
			500	M29EEF 4H500	36389	-	-	-	-	
			630	M29EEF 4H630	36390	-	-	-	-	
3SM29-800 	35 kA (N)	3	400	M29FEF 3N400	36433	-	-	M29FED 3N400	36438	
			500	M29FEF 3N500	36434	-	-	M29FED 3N500	36439	
			630	M29FEF 3N630	36435	-	-	M29FED 3N630	36440	
			700	M29FEF 3N700	36436	-	-	M29FED 3N700	36441	
			800	M29FEF 3N800	36437	-	-	M29FED 3N800	36442	
			4	400	M29FEF 4N400	36443	-	-	-	-
		500		M29FEF 4N500	36444	-	-	-	-	
		630		M29FEF 4N630	36445	-	-	-	-	
		700		M29FEF 4N700	36446	-	-	-	-	
		800		M29FEF 4N800	36447	-	-	-	-	
		50 kA (S)		3	400	M29FEF 3S400	36448	-	-	M29FED 3S400
			500		M29FEF 3S500	36449	-	-	M29FED 3S500	36454
	630		M29FEF 3S630		36450	-	-	M29FED 3S630	36455	
	700		M29FEF 3S700		36451	-	-	M29FED 3S700	36456	
	800		M29FEF 3S800		36452	-	-	M29FED 3S800	36457	
	4		400		M29FEF 4S400	36458	-	-	-	-
			500	M29FEF 4S500	36459	-	-	-	-	
			630	M29FEF 4S630	36460	-	-	-	-	
			700	M29FEF 4S700	36461	-	-	-	-	
			800	M29FEF 4S800	36462	-	-	-	-	
			65 kA (H)	3	400	M29FEF 3H400	36463	-	-	M29FED 3H400
	500				M29FEF 3H500	36464	-	-	M29FED 3H500	36469
	630				M29FEF 3H630	36465	-	-	M29FED 3H630	36470
	4			700	M29FEF 3H700	36466	-	-	M29FED 3H700	36471
				800	M29FEF 3H800	36467	-	-	M29FED 3H800	36472
				400	M29FEF 4H400	36473	-	-	-	-
	50 kA (S)		3	500	M29FEF 4H500	36474	-	-	-	-
				630	M29FEF 4H630	36475	-	-	-	-
		700		M29FEF 4H700	36476	-	-	-	-	
		4	800	M29FEF 4H800	36477	-	-	-	-	

Electronic Type

	Breaking capacity	Poles	Rated current (A)	Fixed type		Plug in type		Withdrawable type	
				Type code	Order code	Type code	Order code	Type code	Order code
	50 kA (S)	3	800	M29GEF 3S800	34289	-	-	M29GED 3S800	34298
			1000	M29GEF 3S1000	34290	-	-	M29GED 3S1000	34299
			1250	M29GEF 3S1250	34291	-	-	M29GED 3S1250	34300
		4	800	M29GEF 4S800	23073	-	-	M29GED 4S800	23076
			1000	M29GEF 4S1000	23074	-	-	M29GED 4S1000	23077
			1250	M29GEF 4S1250	23075	-	-	M29GED 4S1250	23078
	65 kA (H)	3	800	M29GEF 3H800	34292	-	-	M29GED 3H800	34301
			1000	M29GEF 3H1000	34293	-	-	M29GED 3H1000	34302
			1250	M29GEF 3H1250	34294	-	-	M29GED 3H1250	34303
		4	800	M29GEF 4H800	23079	-	-	M29GED 4H800	23082
			1000	M29GEF 4H1000	23080	-	-	M29GED 4H1000	23083
			1250	M29GEF 4H1250	23081	-	-	M29GED 4H1250	23084
	85 kA (G)	3	800	M29GEF 3G800	34295	-	-	M29GED 3G800	34304
			1000	M29GEF 3G1000	34296	-	-	M29GED 3G1000	34305
			1250	M29GEF 3G1250	34297	-	-	M29GED 3G1250	34306
		4	800	M29GEF 4G800	23085	-	-	M29GED 4G800	23088
			1000	M29GEF 4G1000	23086	-	-	M29GED 4G1000	23089
			1250	M29GEF 4G1250	23087	-	-	M29GED 4G1250	23090
	50 kA (S)	3	800	M29HEF 3S800	34307	-	-	M29HED 3S800	34319
			1000	M29HEF 3S1000	34308	-	-	M29HED 3S1000	34320
			1250	M29HEF 3S1250	34309	-	-	M29HED 3S1250	34321
		4	1600	M29HEF 3S1600	34310	-	-	M29HED 3S1600	34322
			800	M29HEF 4S800	23091	-	-	M29HED 4S800	23095
			1000	M29HEF 4S1000	23092	-	-	M29HED 4S1000	23096
	65 kA (H)	3	1250	M29HEF 4S1250	23093	-	-	M29HED 4S1250	23097
			1600	M29HEF 4S1600	23094	-	-	M29HED 4S1600	23098
			800	M29HEF 3H800	34311	-	-	M29HED 3H800	34323
		4	1000	M29HEF 3H1000	34312	-	-	M29HED 3H1000	34324
			1250	M29HEF 3H1250	34313	-	-	M29HED 3H1250	34325
			1600	M29HEF 3H1600	34314	-	-	M29HED 3H1600	34326
	85 kA (G)	3	800	M29HEF 4H800	23099	-	-	M29HED 4H800	23103
			1000	M29HEF 4H1000	23100	-	-	M29HED 4H1000	23104
			1250	M29HEF 4H1250	23101	-	-	M29HED 4H1250	23105
		4	1600	M29HEF 4H1600	23102	-	-	M29HED 4H1600	23106
			800	M29HEF 3G800	34315	-	-	M29HED 3G800	34327
			1000	M29HEF 3G1000	34316	-	-	M29HED 3G1000	34328
		4	1250	M29HEF 3G1250	34317	-	-	M29HED 3G1250	34329
			1600	M29HEF 3G1600	34318	-	-	M29HED 3G1600	34330
			800	M29HEF 4G800	23107	-	-	M29HED 4G800	23111
			1000	M29HEF 4G1000	23108	-	-	M29HED 4G1000	23112
			1250	M29HEF 4G1250	23109	-	-	M29HED 4G1250	23113
			1600	M29HEF 4G1600	23110	-	-	M29HED 4G1600	23114

Motor driven mechanism

Function




- Used for opening and closing the circuit breaker remotely

Technical specifications

Model type	MD1	MD2	MD3
Application	3SM29-250, 3SM29-400	3SM29-125, 3SM29-160	3SM29-630, 3SM29-800 3SM29-1600
Operating voltage range	(85 % - 110 %) Un		
Rated control voltage	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC
Operating current (A)	≤ 2	≤ 0.5	≤ 7.5
Start power consumption in 220/380 V AC (VA)	510	220	660
Continuance power consumption in 220/380 V AC (VA)	360	110	110 (180)
Start power consumption in 110/220 V DC (W)	510	220	600

Continuance power consumption in 110/220 V DC (W)	360	110	180
Opening time (s)	0.1	0.1	0.1
Closing time (s)	0.1	0.1	0.3
Electrical life (times)	4000	8000	3000
Protection degree	IP40		

Selection and ordering data






Model	Application		Rated control voltage (V AC)	Type code	Order code
	Frame A	3SM29-125	220...240 V AC	M29A MM240A	10709
			380...415 V AC	M29A MM415A	32727
	Frame B	3SM29-160	220...240 V AC	M29B MM240A	10719
			380...415 V AC	M29B MM415A	32728
	Frame C	3M29-250	220...240 V AC	M29C MM240A	10729
			380...415 V AC	M29C MM415A	32729
	Frame D	3SM29-400	220...240 V AC	M29DMM240A	10739
			380...415 V AC	M29D MM415A	32730
	Frame E/F	3SM29-630...800	220...240 V AC	M29EF MM240A	10749
			380...415 V AC	M29EF MM415A	32731
	Frame G/H	3SM29-1250...1600	220...240 V AC	M29GH MM240A	10759
			380...415 V AC	M29GH MM415A	32732

Rotary handle operation mechanism

Function

- Used for opening and closing the circuit breaker
- Used for rotating the circuit breaker, not pushing-pulling it upwards-downwards

Selection and ordering data

Installation	Operation device	Rotary handle	Suitable frame		Without interlock		With interlock	
					Type code	Order code	Type code	Order code
In breaker 	RM2		Frame A	3SM29-125	-	-	-	-
			Frame B	3SM29-160	-	-	-	-
			Frame C	3SM29-250	M29C RM1	10750	M29C RM1L	10711
			Frame D	3SM29-400	M29D RM1	10755	M29D RM1L	10712
			Frame E/F	3SM29-630...800	M29EF RM1	10756	M29EF RM1L	10713
			Frame G/H	3SM29-1250...1600	M29GH Rm1	10760	M29GH RM1L	10714
On door of switchboard    	RM2 central type	Round type Short handle	Frame A	3SM29-125	-	-	-	-
			Frame B	3SM29-160	-	-	-	-
			Frame C	3SM29-250	M29C RM2AS	10731	M29C RM2ASL	10751
		Round type Long handle	Frame D	3SM29-400	M29D RM2AS	10732	M29D RM2ASL	10752
			Frame E/F	3SM29-630...800	M29EF RM2AL	10733	M29EF RM2ALL	10753
			Frame G/H	3SM29-1250...1600	M29GH RM2AL	10734	M29GH RM2ALL	10754
	RM3 eccentricity	Round type Short handle	Frame A	3SM29-125	M29A RM3AS	32753	M29A RM3ASL	10730
			Frame B	3SM29-160	M29B RM3AS	32754	M29B RM3ASL	10736
			Frame C	3SM29-250	M29C RM3AS	32755	M29C RM3ASL	33040
		Round type Long handle	Frame D	3SM29-400	M29D RM3AS	32756	M29D RM3ASL	33041
			Frame E/F	3SM29-630...800	M29EF RM3AL	10710	M29EF RM3ALL	33042
			Frame G/H	3SM29-1250...1600	M29GH RM3AL	10720	M29GH RM3ALL	33043
	Square type Short handle	Round type Short handle	Frame A	3SM29-125	M29A RM3BS	33044	M29A RM3BSL	33050
			Frame B	3SM29-160	M29B RM3BS	33045	M29B RM3BSL	33051
			Frame C	3SM29-250	M29C RM3BS	33046	M29C RM3BSL	33052
		Square type Long handle	Frame D	3SM29-400	M29D RM3BS	33047	M29D RM3BSL	33053
			Frame E/F	3SM29-630...800	M29EF RM3BL	33048	M29EF RM3BLL	33054
			Frame G/H	3SM29-1250...1600	M29GH RM3BL	33049	M29GH RM3BLL	33055

Shunt release




Function

- Used for opening the circuit breaker remotely

Technical specifications

Model type	SR91	SR92	SR93
Application	3SM29-125 3SM29-160	3SM29-250 3SM29-400	3SM29-630, 3SM29-800 3SM29-1600
Operating voltage range	(70 % - 110 %) Un		
Rated control voltage	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC
Response time (ms)	≥ 20, ≤ 60		
Power consumption in 220/380 V AC (VA)	150	150	150
Power consumption in 110/220 V DC (W)	150	150	150

Selection and ordering data

Model	Application		Rated control voltage (V AC)	Type code	Order code
	Frame A/B	3SM29-125...160	220...240 V AC	M29AB SH240A	10701
			380...415 V AC	M29AB SH415A	10702
			110 V DC	M29AB SH110D	32733
			220 V DC	M29AB SH220D	32734
	Frame C/D	3M29-250...400	220...240 V AC	M29CD SH240A	10721
			380...415 V AC	M29CD SH415A	10722
			110 V DC	M29CD SH110D	32735
			220 V DC	M29CD SH220D	32736
	Frame E/F/G/H	3SM29-630...1600	220...240 V AC	M29FEGH SH240A	10741
			380...415 V AC	M29FEGH SH415A	10742
			110 V DC	M29FEGH SH110D	32737
			220 V DC	M29FEGH SH220D	32738

Under-voltage release




Function

- Used for opening the circuit breaker when energy cuts off or voltage goes below 70 % of the operating voltage

Technical specifications

Model type	UR91	UR92	UR93
Application	3SM29-125, 3SM29-160	3SM29-250, 3SM29-400	3SM29-630, 3SM29-800, 3SM29-1600
Action voltage range	(35 % - 70 %) U _e		
Guarantee close voltage range	(85 % - 110 %) U _e		
Guarantee no-close voltage range	≤ 35 % U _e		
Rated control voltage (V)	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC	220 V AC, 380 V AC, 220 V DC, 110 V DC
Response time (ms)	≥ 20, ≤ 60		
Power consumption in 220/380 V AC (VA)	10	10	10
Power consumption in 110/220 V DC (W)	4	4	4

Selection and ordering data




Model	Application		Rated control voltage (V AC)	Type code	Order code
UR91 	Frame A/B	3SM29-125...160	220...240 V AC	M29AB UV240A	10703
			380...415 V AC	M29AB UV415A	10704
			110 V DC	M29AB UV110D	32739
			220 V DC	M29AB UV220D	32740
UR92 	Frame C/D	3M29-250...400	220...240 V AC	M29CDUV240A	10723
			380...415 V AC	M29CD UV415A	10724
			110 V DC	M29CD UV110D	32741
			220 V DC	M29CD UV220D	32742
UR93 	Frame E/F/G/H	3SM29-630...1600	220...240 V AC	M29EFGH UV240A	10743
			380...415 V AC	M29EFGH UV415A	10744
			110 V DC	M29EFGH UV110D	32743
			220 V DC	M29EFGH UV220D	32744

Auxiliary contact and alarm contact

Function

- Indication of contacting status
- Used for supplying electrical signal of the circuit breaker according to the operating position

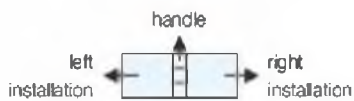
Selection and ordering data

Model	Application		Function	Contact position	Type code	Order code
	Frame A/B	3SM29-125...160	Auxiliary contact	1NO+1NC	M29AB AC11	10705
			Auxiliary contact + alarm contact	1NO+1NC+1W	M29AB CW11	10726
	Frame C/D	3M29-250...400	Auxiliary contact	1NO+1NC	M29CD AC11	10706
				2NO+2NC	M29CD AC22	10715
			Auxiliary contact + alarm contact	1NO+1NC+1W	M29CD CW11	10735
	Frame E/F/G/H	3SM29-630...1600	Auxiliary contact	1NO+1NC	M29EFGH AC11	10716
				2NO+2NC	M29EFGH AC22	10725
			Auxiliary contact + alarm contact	1NO+1NC+1W	M29EFGH CW11	10745

Accessories introduction

Name of accessories	Accessory code		Accessory installation and lead cable method			
	Thermal magnetic release	Duplex release	3SM29-125, 3SM29-160 3P, 4P	3SM29-250, 3SM29-400 3P, 4P	3SM29-630, 3SM29-800 3P, 4P	3SM29-1250, 3SM29-1600 3P, 4P
Alarm Contact	208	308				
Shunt release	210	310				
Shunt Release Alarm Contact	218	318				
Auxiliary Contact	220	320				
Auxiliary Contact Alarm Contact	228	328				
Under voltage release	230	330				
Under voltage release Alarm Contact	238	338				
Shunt release Auxiliary Contact	240	340				
Shunt Release Under voltage release Two-sets Auxiliary Contact	248	348				
Two-sets Auxiliary Contact	260	360				
Two-sets Auxiliary Contact Alarm Contact	268	368				
Under voltage release Auxiliary Contact	270	370				
Under voltage release Auxiliary Contact Alarm Contact	278	378				

Attention:



Alarm Contact

Two-sets Auxiliary Contact

Shunt release

Auxiliary Contact

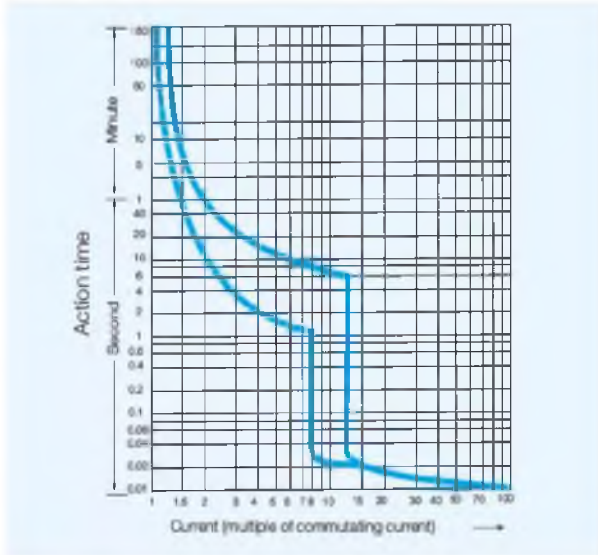
Under voltage release

Lead cable direction

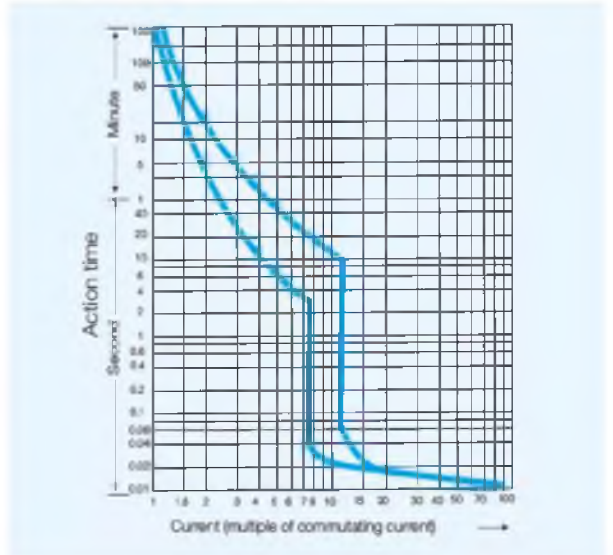
Frame rated current size Im (A)	Circumstance temperature						Rated current	Current settings of inverse time delay		Adjustable instantaneous current			Instantaneous releasing current	In
	+10	+20	+30	+40	+50	+60		40 °C	Setting IRI	5 In	7.5 In	10 In		
	°C	°C	°C	°C	°C	°C		A/B/C phase	N pole	(A)				
125	1.19	1.03	1.06	1.0	0.93	0.87	12.5 A	12.5 A	12.5A	-	-	-	500 A	-
							16 A	16 A	16 A	-	-	-	500 A	10
							20 A	20 A	20 A	-	-	-	500 A	10
							25 A	25 A	25 A	-	-	-	500 A	10
							32 A	32 A	32 A	-	-	-	500 A	10
							40 A	40 A	40 A	-	-	-	500 A	10
							50 A	50 A	50 A	-	-	-	500 A	10
							63 A	63 A	63 A	-	-	-	630 A	12
							80 A	80 A	80 A	-	-	-	800 A	12
							100 A	100 A	100 A	-	-	-	1000 A	12
						125 A	125 A	125 A	-	-	-	1250 A	12	
160	1.15	1.10	1.05	1.0	0.94	0.88	32 A	22.4 ~ 32 A	22.4 ~ 32 A	-	-	-	500 A	10
							40 A	28 ~ 40 A	28 ~ 40 A	-	-	-	500 A	10
							50 A	35 ~ 50 A	35 ~ 50 A	-	-	-	500 A	10
							63 A	44.1 ~ 63 A	44.1 ~ 63 A	-	-	-	630 A	12
							80 A	56 ~ 80 A	56 ~ 80 A	-	-	-	800 A	12
							100 A	70 ~ 100 A	70 ~ 100 A	-	-	-	1000 A	12
							125 A	87.5 ~ 125 A	87.5 ~ 125 A	-	-	-	1250 A	12
							160 A	112 ~ 160 A	112 ~ 160 A	-	-	-	1600 A	12
250	1.14	1.10	1.05	1.0	0.95	0.87	125 A	87.5 ~ 125 A	87.5 ~ 125 A	-	-	-	1250 A	12
							160 A	112 ~ 160 A	112 ~ 160 A	-	-	-	1600 A	12
							180 A	126 ~ 180 A	126 ~ 180 A	-	-	-	1800 A	12
							200 A	140 ~ 200 A	140 ~ 200 A	-	-	-	2000 A	12
							225 A	157.5 ~ 225 A	157.5 ~ 225 A	-	-	-	2250 A	12
							250 A	175 ~ 225 A	175 ~ 225 A	-	-	-	2500 A	12
400	1.13	1.11	1.04	1.0	0.92	0.85	250 A	175 ~ 250 A	175 ~ 250 A	1250	1875	2500	2500 A	12
							315 A	220.5 ~ 315 A	220.5 ~ 315 A	1575	2363	3150	3150 A	12
							350 A	245 ~ 350 A	245 ~ 350 A	1750	2625	3500	3500 A	12
							400 A	280 ~ 400 A	280 ~ 400 A	1750	2625	4000	4000 A	12
630 800	1.10	1.08	1.03	1.0	0.84	0.77	400 A	400 A	400 A	-	-	-	4000 A	-
							500 A	500 A	500 A	-	-	-	5000 A	-
							630 A	630 A	630 A	-	-	-	6300 A	-
							700 A	700 A	700 A	-	-	-	7000 A	-
							800 A	800 A	800 A	-	-	-	8000 A	-
1600 1250	1.08	1.06	1.02	1.0	0.8	0.73	800 A	800 A	800 A	-	-	-	-	-
							1000 A	1000 A	1000 A	-	-	-	-	-
							1250 A	1250 A	1250 A	-	-	-	-	-
							1600 A	1600 A	1600 A	-	-	-	-	-

Tripping curve

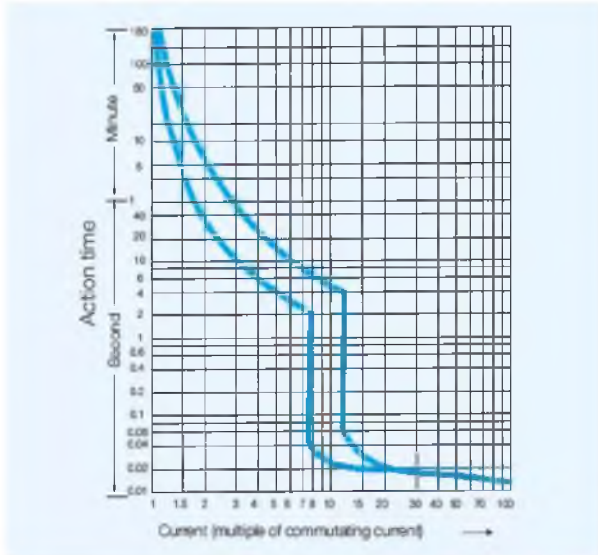
3SM29-125



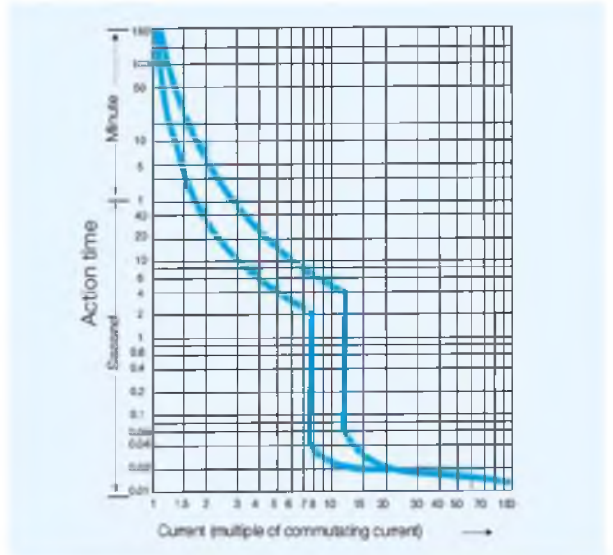
3SM29-160



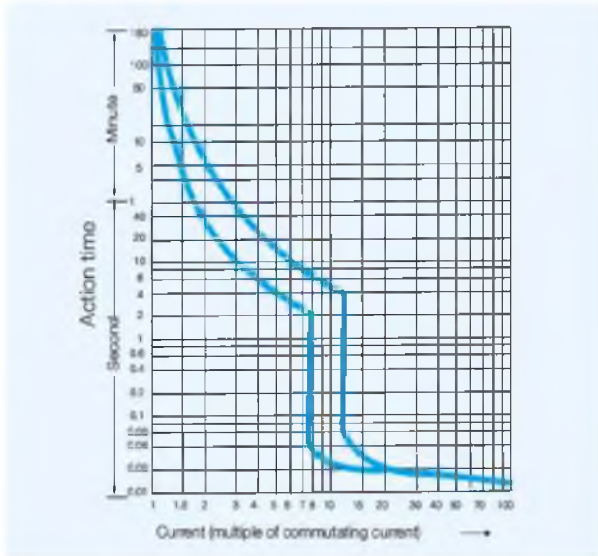
3SM29-250



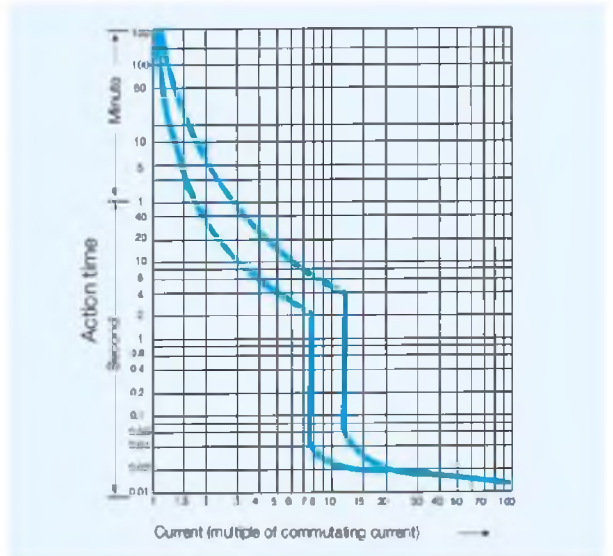
3SM29-400



3SM29-630

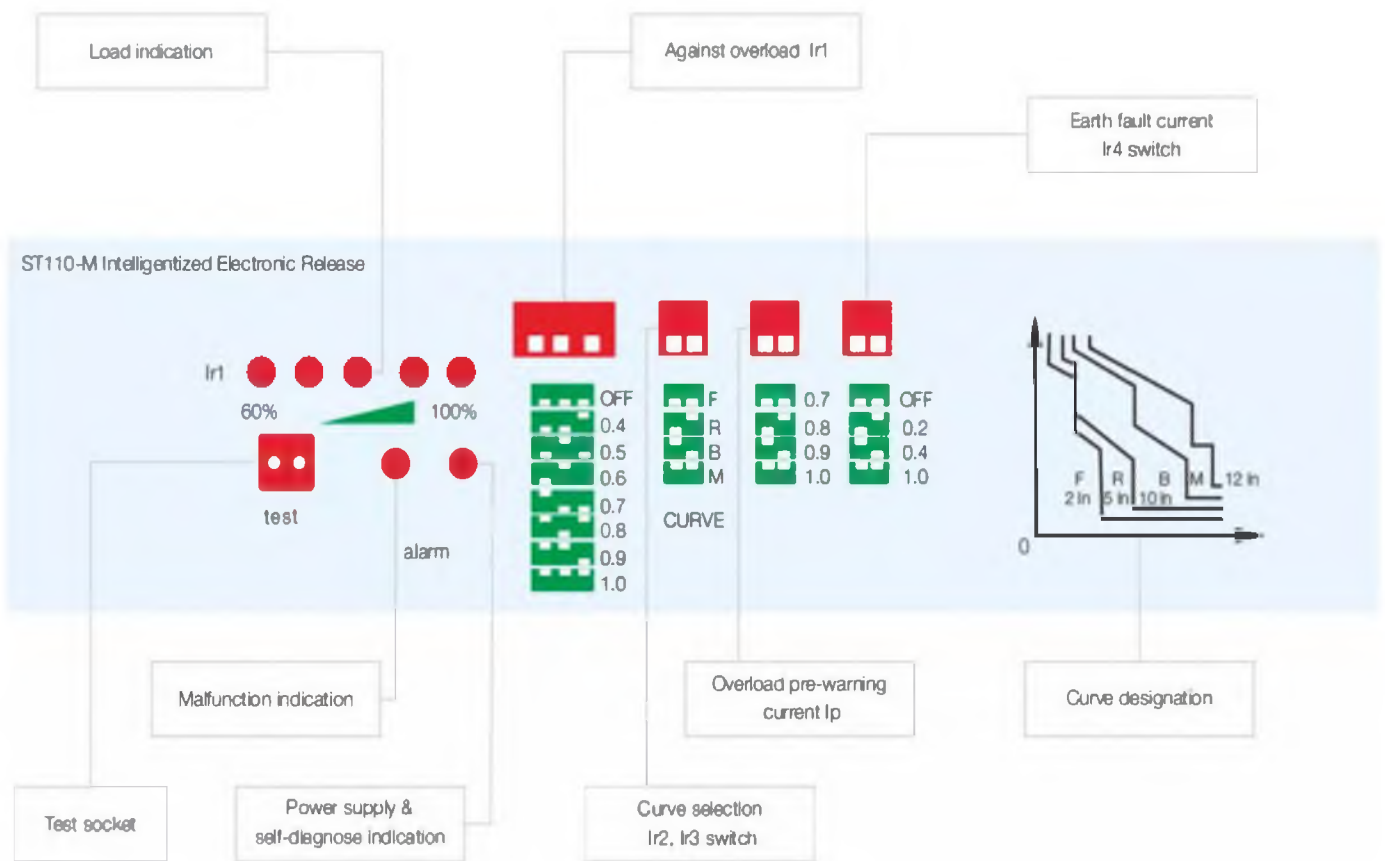


3SM29-800

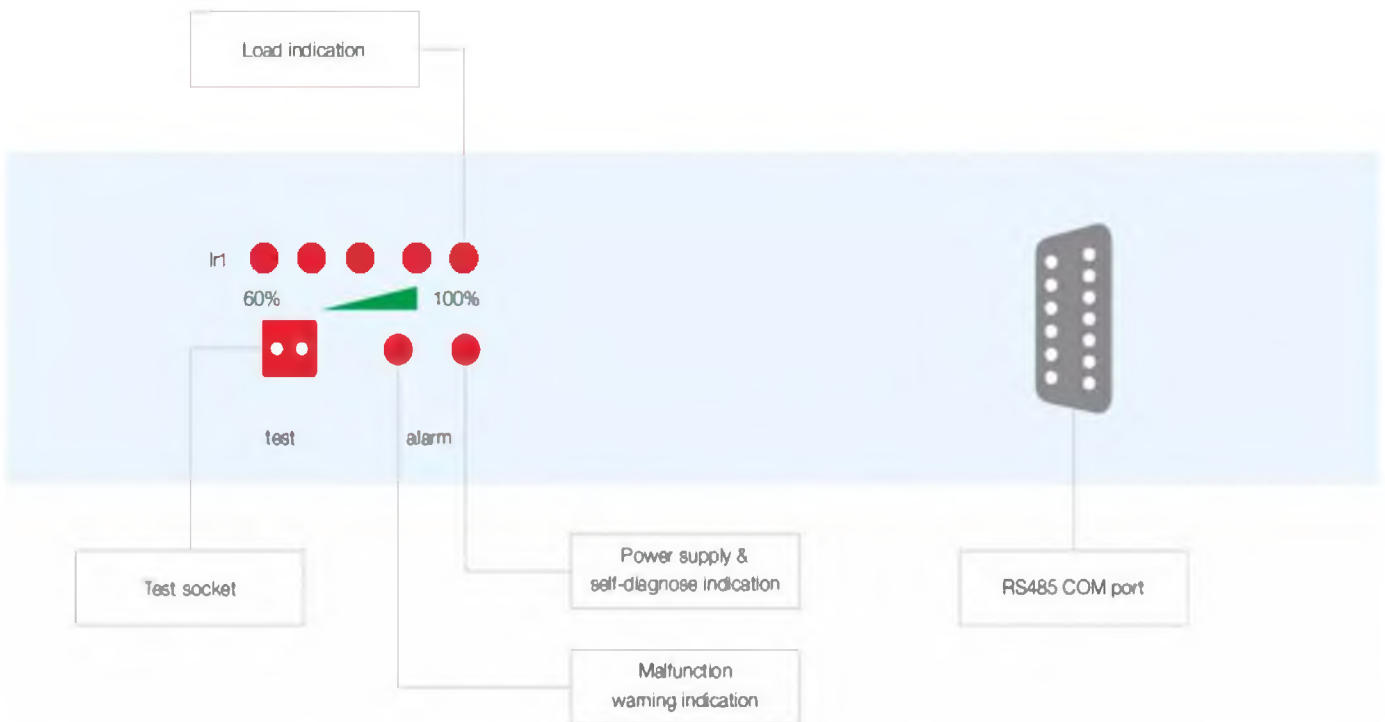


Microprocessor control panel

ST110-M (ST110-M/F) Microprocessor electronic release panel



ST110-H (ST110-H/F) Microprocessor electronic release's panel



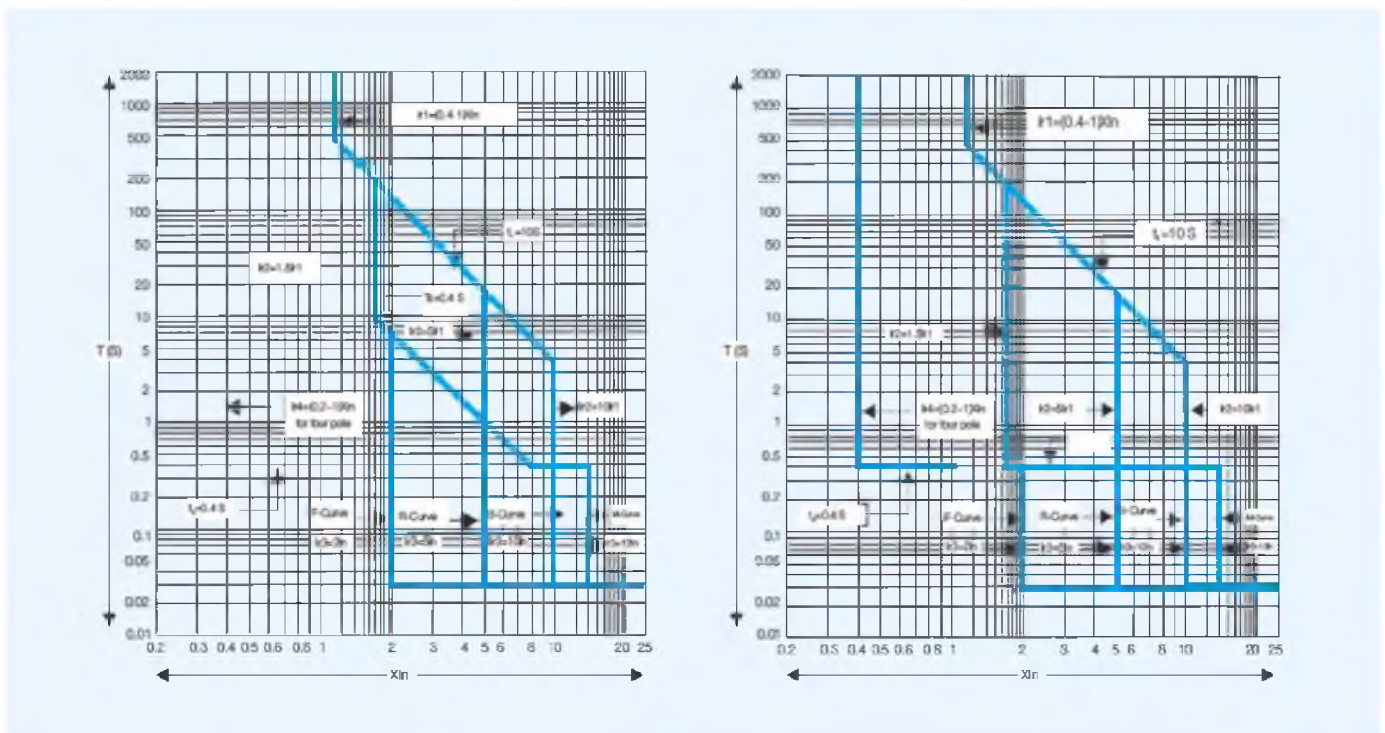
Releasing curve

Microprocessor electronic release main function

Main function of microprocessor electronic release	
Main circuit load indication	The LED in panel indicates 60 %, 80 %, 90 %, 100 %
Power supply indication	The LED in panel indicates
Self-diagnose indication	The LED in panel indicates

Overload pre-warning indication	The LED in panel indicates
Earth fault indication	The LED in panel indicates
Thermal memory	Record over-load cumulate caloric effect
Fast set protection character curve	Basis on different purpose ,user can choose short-circuit release's character (curve I
Signal output of the transition ray contact between breaker and ST-200 Intelligentized control module	Overload pre-warning releasing alarm Earth fault alarm Signal of breaker's ON / OFF
Releasing test	Test socket
Setting panel parameter User can reset the protection character when the main circuit with or without power running	Switch commutating Switch commutating Switch commutating Switch commutating Switch commutating

Electronic release protection character curve



Protection performance of residual current release

Protective performance of circuit breaker's residual current release for power distribution:

No.	Test current type	I/In	Engaged time endurance	Start state
1	Engaged non-release current	1.05	2 h (In > 63 A) 1 h (In ≤ 63 A)	Cold
2	Engaged release current	1.30	2 h (In > 63 A) 1 h (In ≤ 63 A)	Hot

Protective performance of circuit breaker's residual current release for motor protection:

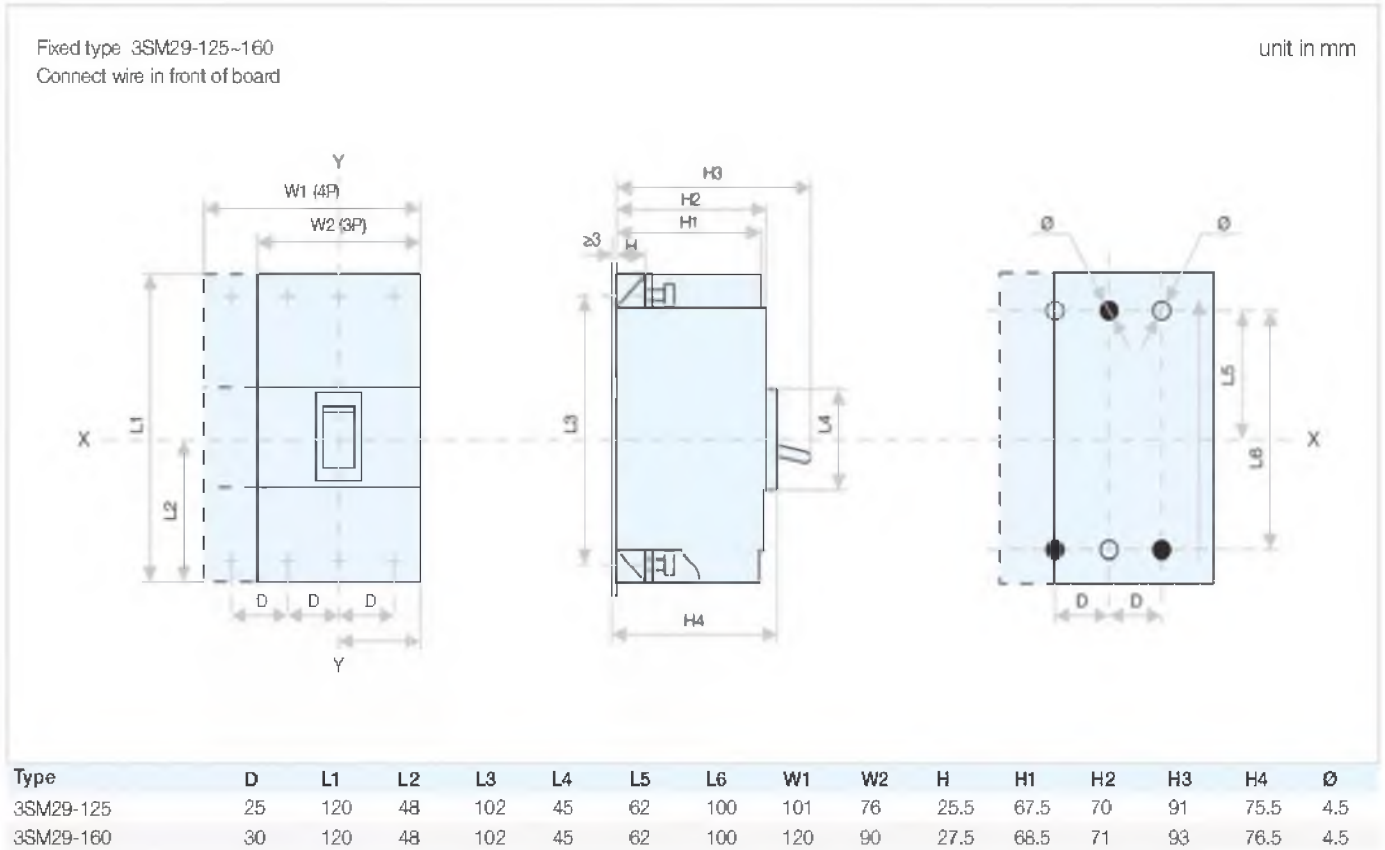
No.	Test current type	I/In	Engaged time endurance	Start state
1	Engaged non-release current	1.0	> 2 h	Cold state
2	Engaged release current	1.2	≤ 2 h	Hot
		1.5	≤ 2 min (In ≤ 200 A) ≤ 4 min (200 A < In ≤ 400 A)	
		7.2	2 s < Tp ≤ 10 s (In ≤ 200 A) 4 s < Tp ≤ 10 s (200 A < In ≤ 400 A)	Cold

Outline and installation dimensions

Installation type: Fixed, Plug-in, Withdrawable type

Frame rated current	Installation					
	Fixed		Plug in		Withdrawable	
	3P	4P	3P	4P	3P	4P
125 A	■	■	■	■		
160 A	■	■	■	■		
250 A	■	■	■	■	■	■
400 A	■	■	■	■	■	■
630 A	■	■			■	■
800 A	■	■			■	■
1250 A	■				■	
1600 A	■				■	

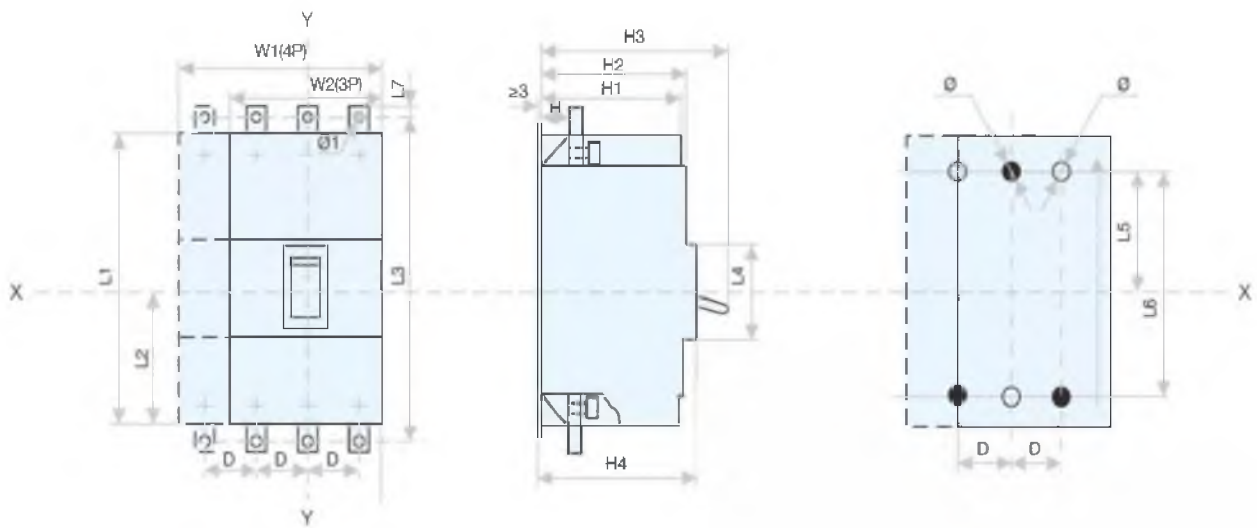
Breaker's installation dimensions



Outline and installation dimensions

Fixed type 3SM29-250~1600
Connect wire in front of board

unit in mm

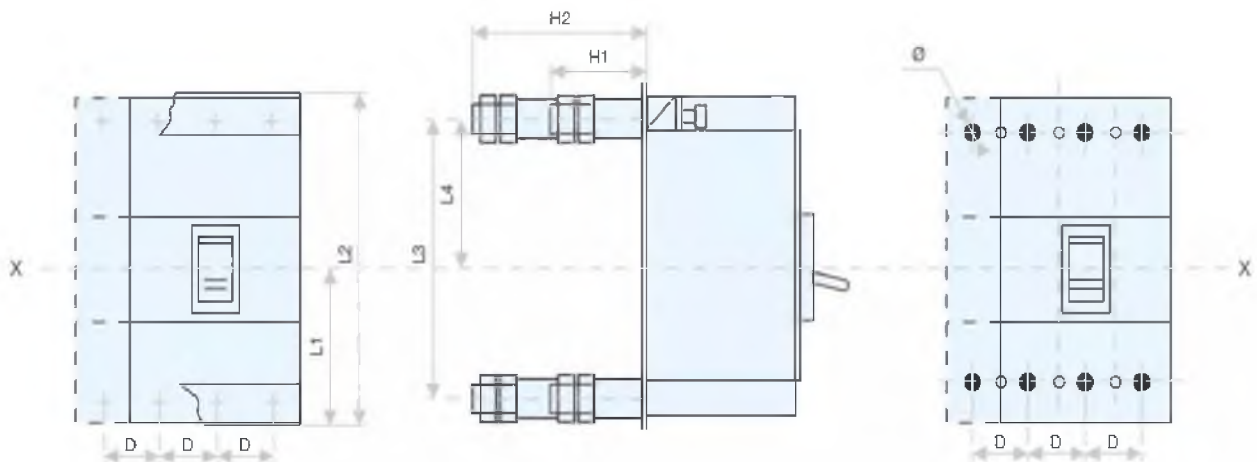


Type	D	L1	L2	L3	L4	L5	L6	W1	W2	H	H1	H2	H3	H4	Ø	L7	Ø1
3SM29-250	35	170	87.25	206	105	73.75	139	140	105	25	101.5	103.5	135	113	5.5	10.8	8.5
3SM29-400	43.75	254	125.25	281	105	107.25	214	183.75	140	25	101.5	103.5	135	113	5.5	12	14
3SM29-630	70	268	142.75	241	105	109.25	375	280	210	23	101.5	103.5	167.5	115	5.5	10.0	11
3SM29-800	70	268	142.75	241	105	109.25	237	280	210	23	101.5	103.5	167.5	115	5.5	10.0	11
3SM29-1600	70	406	189	513	105	203	378	-	210	39	137	138.5	204.5	152	5.5	13.5	11

Outline and installation dimensions

Fixed type 3SM29-125~800
Connect wire behind board

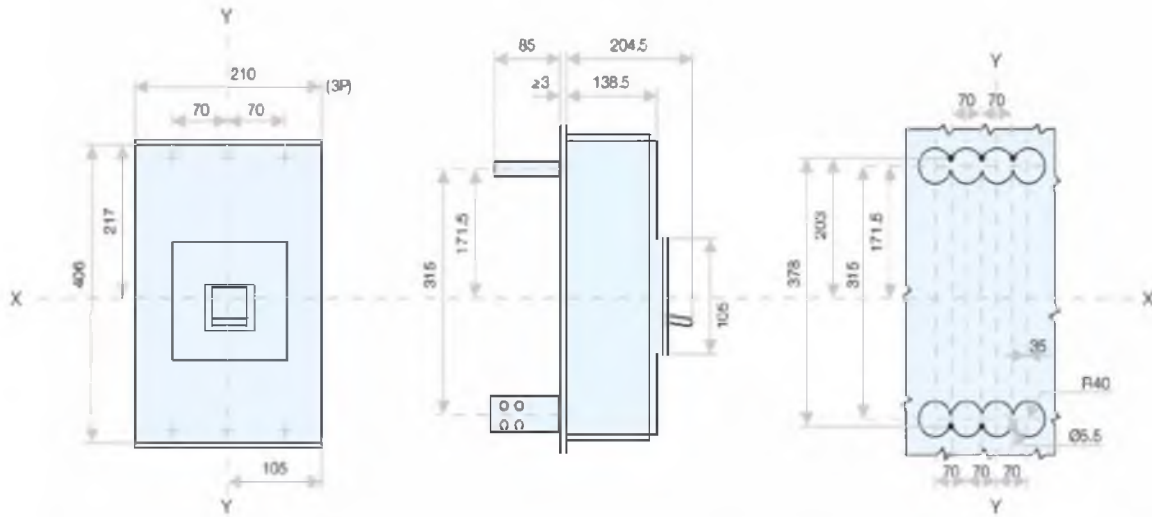
unit in mm



Type	D	L1	L2	L3	L4	H1	H2	Ø
3SM29-125	25	50	124	102	39	43	76	18
3SM29-160	30	50	124	102	39	43	76	18
3SM29-250	35	85.25	175	145	73.75	55	105	24
3SM29-400	43.75	131.25	259	218	107.25	55	105	30
3SM29-630	70	145.25	273	241	117.25	55	74.5	50
3SM29-800	70	145.25	273	241	117.25	55	74.5	50

Fixed type 3SM29-1600
Connect wire in front of board

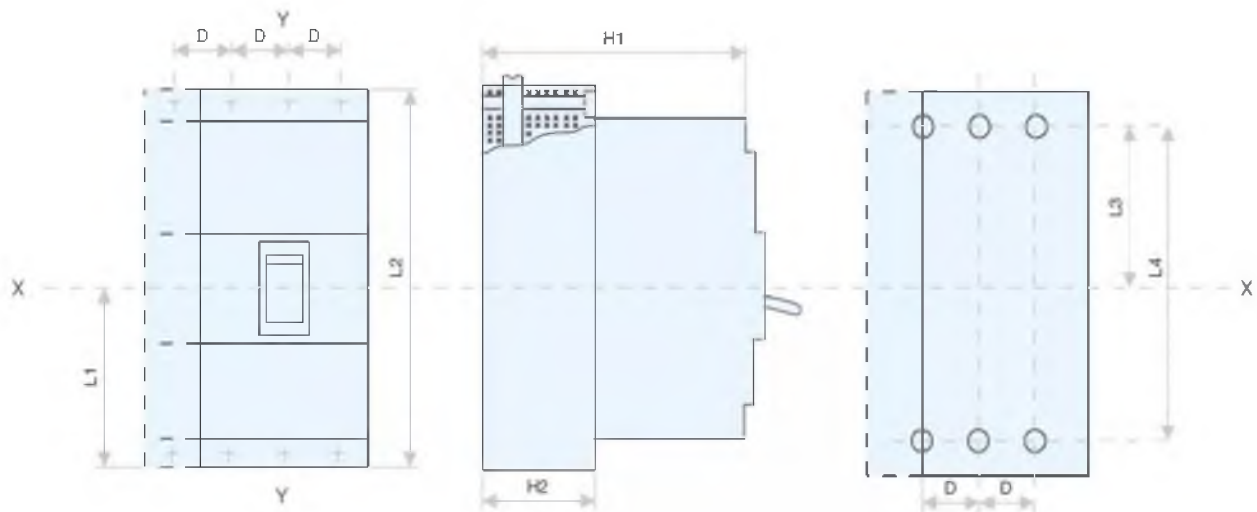
unit in mm



Outline and installation dimensions

Plug-in version 3SM29-125~160
Connect wire in front of board

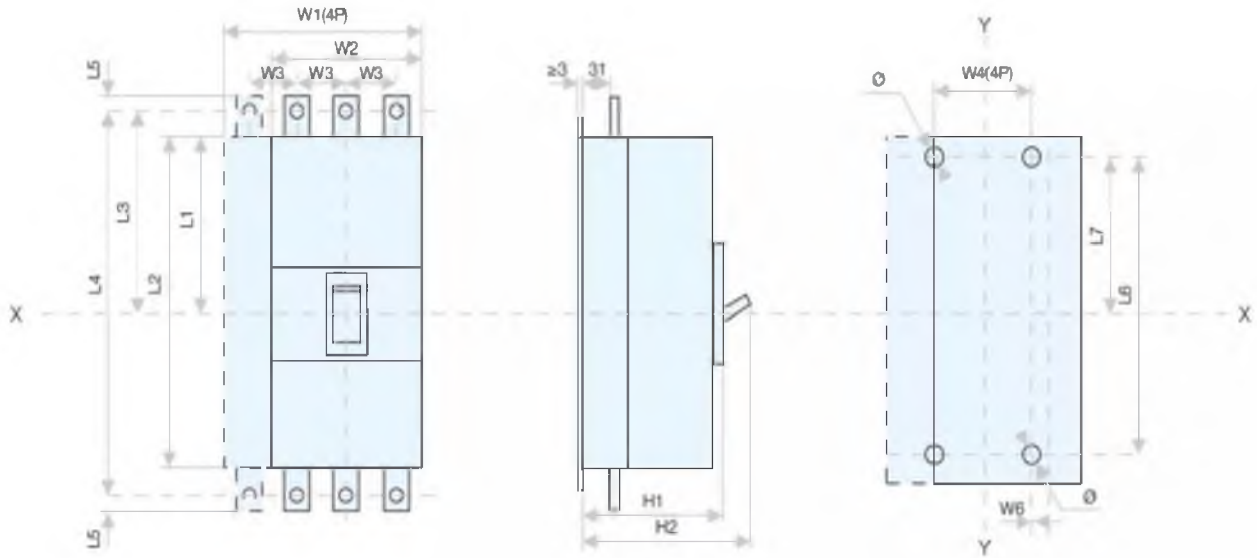
unit in mm



Type	D	L1	L2	L3	L4	H1	H2
3SM29-125	25	70	163	84	144	123	52
3SM29-160	30	70	163	84	144	123	52

Plug-in version 3SM29-250-400
Connect wire in front of board

unit in mm

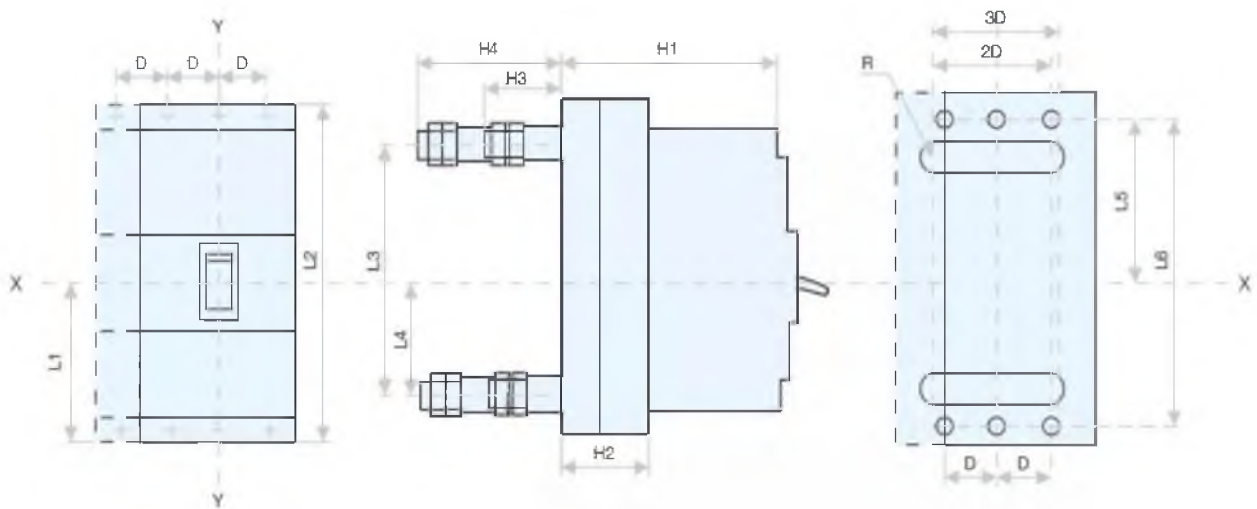


Type	L1	L2	L3	L4	L5	L6	L7	W1	W2	W3	W4	W6	H1	H2	Ø
3SM29-250	89.7	175	107.25	210	10	52.25	100	140	105	35	105	25	153	184.5	5
3SM29-400	127.75	259	150.75	305	14	65.75	135	183.75	140	43.75	160	58	153	184.5	6

Outline and installation dimensions

Plug-in version 3SM29-125-400
Connect wire in front of board

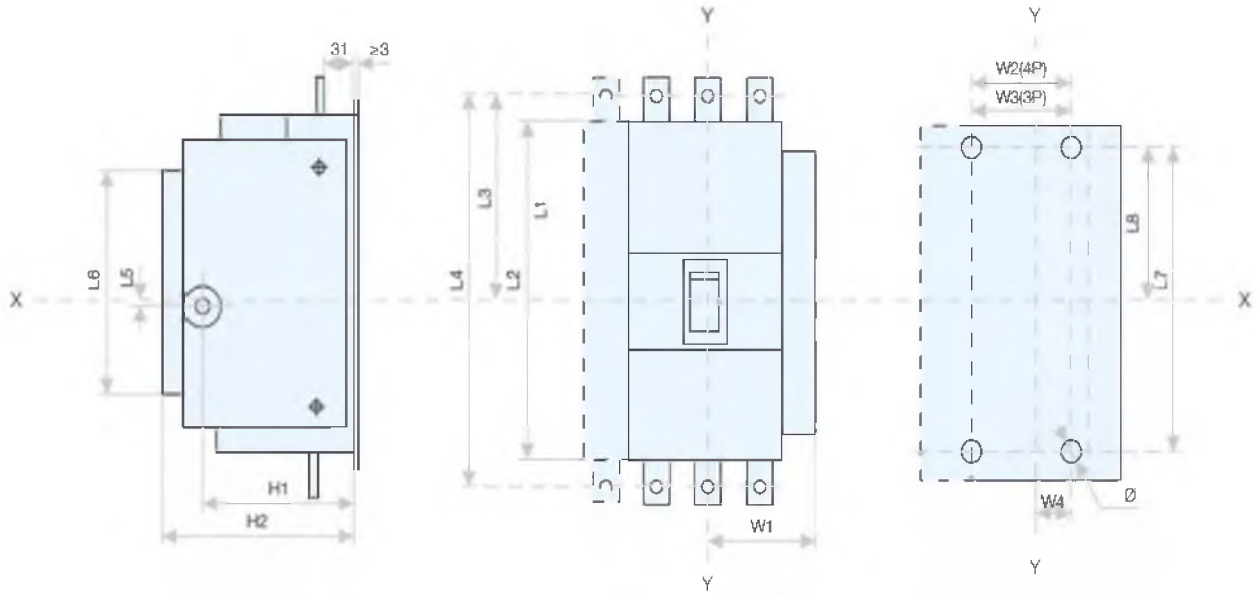
unit in mm



Type	D	L1	L2	L3	L4	L5	L6	H1	H2	H3	H4
3SM29-125	25	70	163	102	39	84	144	123	52	50	80
3SM29-160	30	70	163	102	39	84	144	123	52	50	80
3SM29-250	35	85.25	175	143	69.2	52.5	100	184.5	83	52	96
3SM29-400	43.75	131.25	259	218	110.75	107.25	218	184.5	83	55	100

Draw-out version 3SM29-250~400
Connect wire in front of board

unit in mm

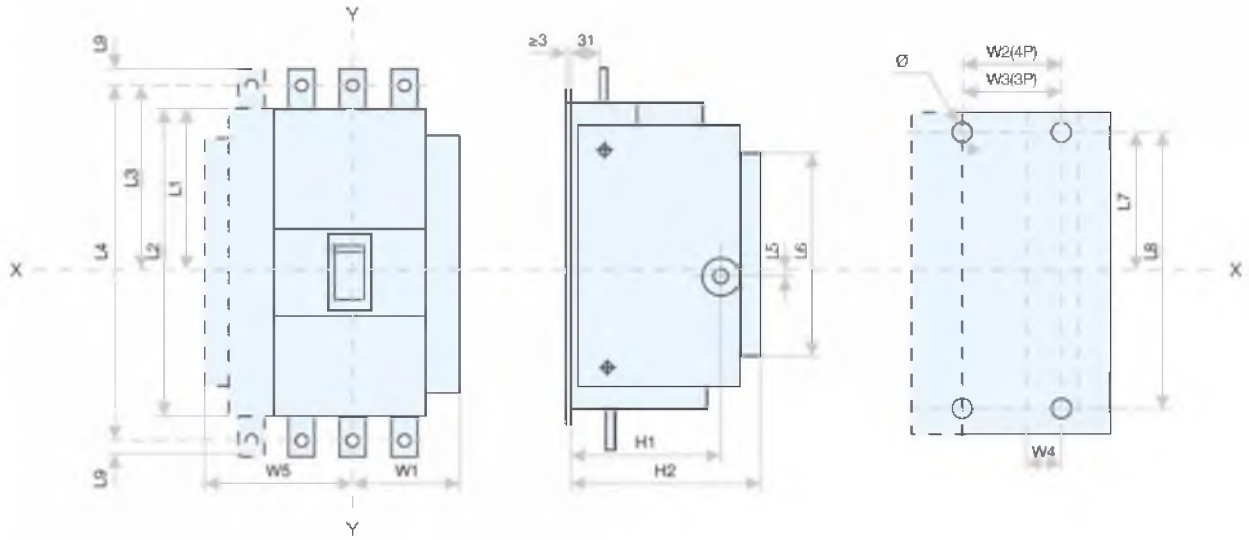


Type	L1	L2	L3	L4	L5	L6	L7	L8	W1	W2	W3	W4	H1	H2	Ø
3SM29-250	89.75	175	107.25	210	1.75	105	52.25	100	84	105	70	25	167	190	5
3SM29-400	127.75	259	150.75	305	1.75	105	65.75	135	101.5	160	115	58	167	190	6

Outline and installation dimensions

Draw-out version 3SM29-630~1600
Connect wire in front of board

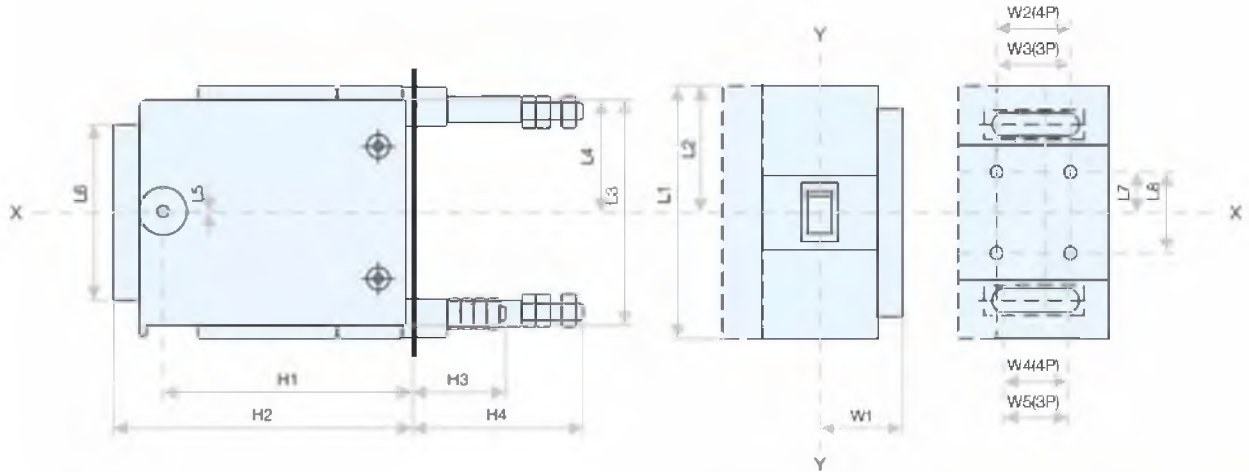
unit in mm



Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	W1	W2	W3	W4	W5	H1	H2	Ø
3SM29-630	133	295	158	345	14.5	140	45.5	120	20	136.5	210	210	140	193.5	167	190	8.5
3SM29-800	133	295	158	345	14.5	140	45.5	120	20	136.5	210	210	140	193.5	167	190	8.5
3SM29-1600	211.25	406	268.25	520	8.25	140	68.25	120	-	136.5	-	210	140	-	218.5	241.5	8.5

Draw-out version
Connect wire behind board

unit in mm



Type	L1	L2	L3	L4	L5	L6	L7	L8	W1	W2	W3	W4	W5	H1	H2	H3	H4	Ø
3SM29-250	175	87.75	143	73.75	1.75	105	52.25	100	84	105	70	70	105	167	190	52	96	5
3SM29-400	259	127.75	218	107.25	1.75	105	65.75	135	101.5	160	115	87.5	131.25	167	190	55	100	6

Outline and installation dimensions

Draw-out version 3SM29-630/800
Connect wire behind board

unit in mm

