

LOADLINE YA7 MCCB

Main Features

- Exceeds the requirements of EN 60947-2
- Electronic MCCBs have adjustable long, short and instantaneous trip functions
- Long time overload adjusts between 1 x In and 0.4 x In for electronic devices
- Electronic MCCBs are utilisation category B and are specifically intended for discrimination
- Ultimate breaking capacities available are 50kA and 70kA at 415V AC for electronic MCCBs
- Maximum cable termination is 300mm² with reduced palm width cable lugs
- Rated operational voltage is 690V AC (Ue)
- Rated insulation voltage is 800V AC (Ui)

CATALOGUE NUMBERS

CURRENT RATING			
MAX (A)	MIN (A)	Cat No (3 pole)	Cat No (4 pole)
Switch Disconnecter			
800	FIXED	YA7B3P800D	YA7B4P800D
1250	FIXED	YA7B3P1250D	YA7B4P1250D

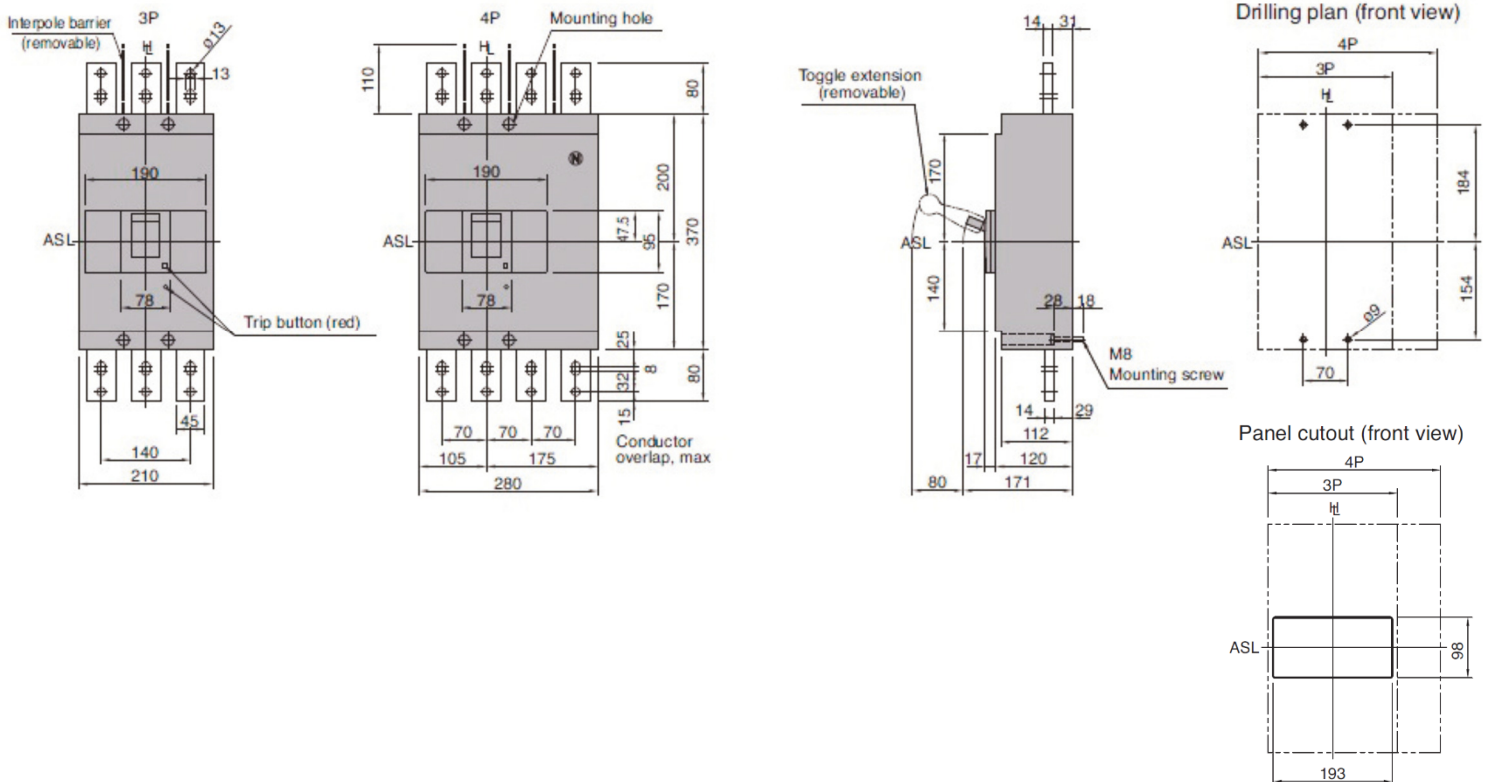
YA7 Frame MCCB Electronic - Icu 50kA			
800	320	YA7H3P800E	YA7H4P800E
1250	500	YA7H3P1250E	YA7H4P1250E

YA7 Frame MCCB Electronic - Icu 70kA			
1250	500	YA7K3P1250E	YA7K4P1250E

Ground fault protection is available on electronic MCCBs. To specify Ground Fault required please add a "G" to the end of the product code e.g. YA7H3P1250EG



Front connected



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YA7 MCCB ACCESSORIES

DESCRIPTION	Cat No (3 pole)	Cat No (4 pole)
Motors and Interlocks		
YA7 / YA8 Motor actuator 100-115V AC	YA7MA115	YA7MA115
YA7 / YA8 Motor actuator 200-230V AC	YA7MA230	YA7MA230
YA7 / YA8 Motor actuator 240V AC	YA7MA240	YA7MA240
YA7 / YA8 Slide type interlock (one between two MCCBs)	YA7MS3P	YA7MS4P
Rotary Handles		
YA7 Panel mounted rotary handle for 513mm panel depth	YA7RH513	YA7RH513
Castell* locking cam for panel mounted rotary handle	YABCLCAM	YABCLCAM
Terminal Protection		
YA7 Terminal shroud for cable lugs	YA7TS3P	YA7TS4P
YA7 / YA8 Interphase barrier (1 off)	YA5TB	YA5TB
YA7 / YA8 Handle lock	YA7DL	YA7DL
Auxiliary and Alarm Switches		
YA Auxiliary changeover switch (AC 240V/3A and DC 125V/0.4A)	YAAUX1	YAAUX1
YA Alarm trip indicator changeover switch (AC 240V/3A and DC 125V/0.4A)	YAAL	YAAL
Shunt Trips		
YA7 / YA8 Frame 100-120V AC	YA7ST120AC	YA7ST120AC
YA7 / YA8 Frame 200-240V AC	YA7ST240AC	YA7ST240AC
YA7 / YA8 Frame 24V DC	YA7ST24DC	YA7ST24DC
Under-voltage Release		
YA7 / YA8 Under-voltage release 100-110V AC	YA6UVR110AC	YA6UVR110AC
YA7 / YA8 Under-voltage release 230-240V AC	YA6UVR240AC	YA6UVR240AC
YA7 / YA8 Under-voltage release 380-415V AC	YA6UVR415AC	YA6UVR415AC
YA7 / YA8 Under-voltage release 24V DC	YA6UVR24DC	YA6UVR24DC
YA7 / YA8 Under-voltage release 100-120V DC	YA6UVR120DC	YA6UVR120DC
YA7 / YA8 Under-voltage release 200-240V DC	YA6UVR240DC	YA6UVR240DC
Accessories		
YA7 Neutral link	YA7NL	-----



Note: Please be advised that MCCBs can be fitted with either a shunt trip or an under-voltage release device; however the MCCB cannot house both of these together.

* Castell is a trademark of Castell Safety International limited.

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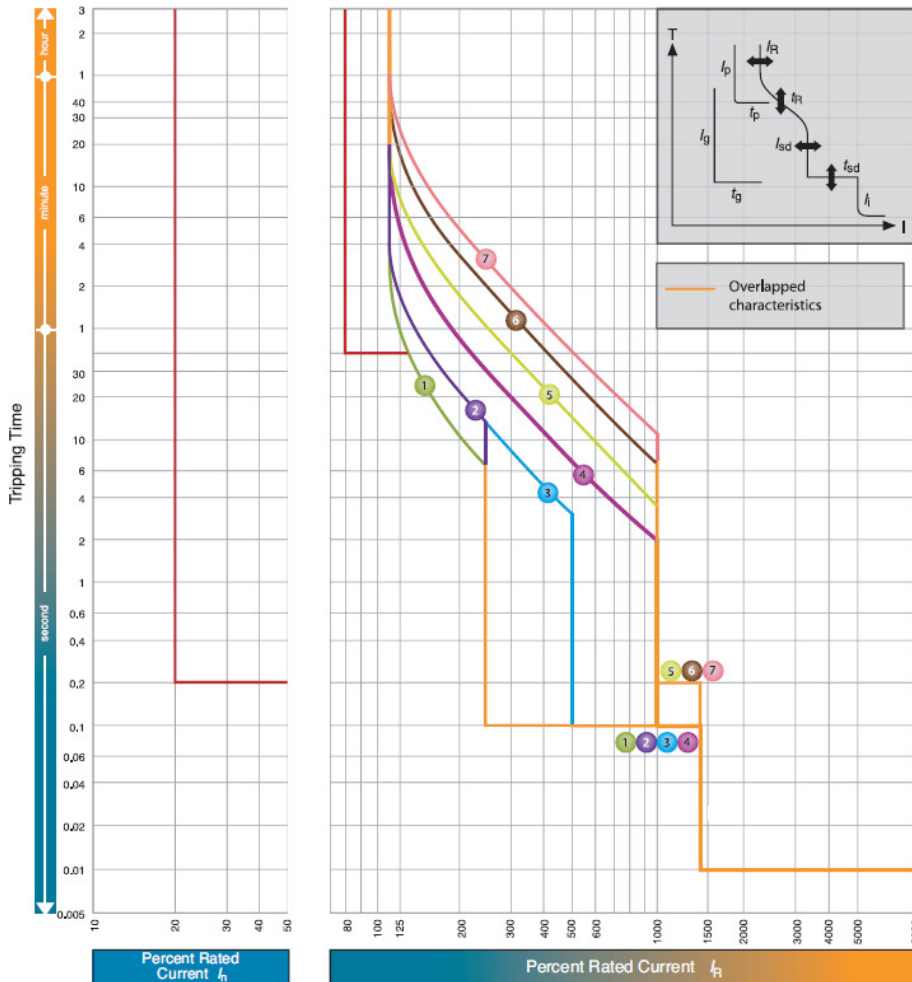
Dorman Smith Frame Size		YA7		
MCCB Type or Sw. Disconnecter		ADJUSTABLE MCCB's		SWITCH DISCONNECTOR
		Electronic	Electronic	Front
Terminal Type		Front	Front	Front
Product Code		YA7H----E	YA7K----E	YA7B----D
No of Poles		3, 4	3, 4	3, 4
Nominal Current Ratings (In) (A) (50°C)		800, 1250	1250	1250
Electrical Characteristics				
Rated Operational Voltage (Ue) (V)	AC 50/60Hz	690	690	690
	DC	-	-	250
Rated Insulation Voltage (Ui) (V)		800	800	800
Rated Impulse Withstand Voltage (Uimp) (kV)		8	8	8
Ultimate breaking capacity (Icu) (kA) (IEC, JIS, AS/NZS)	690V AC	20	25	-
	525V AC	30	45	-
	440V AC	45	65	-
	400/415V AC	50	70	-
	220/240V AC	85	100	-
	250V DC	-	-	-
Service breaking capacity (Ics) (kA)	690V AC	15	20	-
	525V AC	23	34	-
	440V AC	34	50	-
	400/415V AC	38	50	-
	220/240V AC	65	75	-
	250V DC	-	-	-
Rated breaking Capacity (NEMA) (kA)	480V AC	30	45	-
	240V AC	85	100	-
Rated short-circuit making capacity (Icm) (kA)	Peak	-	-	32
Rated short-time withstand current (Icw) (kA)	rms	15	15	15
Rated Frequency	Hz	50/60	50/60	50/60
Protection				
Adjustable Thermal		-	-	-
Adjustable Magnetic		-	-	-
Microprocessor		Yes	Yes	-
Utilisation Category		B	B	AC-23A
IP Rating	Terminals	-	-	-
	Toggle	IP30	IP30	IP30
Installation				
Front Connection		-	-	-
Straight Extension Terminals		Standard	Standard	Standard
Spread Extension Terminals		-	-	-
Cable Clamps		-	-	-
Rear Terminals		Optional	Optional	Optional
DIN-rail Mounting		Not available	Not available	Not available
Plug-in		-	-	-
Draw-out		Not available	Not available	Not available
Dimensions				
Height (mm)		370	370	370
1 Pole Width (mm)		-	-	-
3 Pole Width (mm)		210	210	210
4 Pole Width (mm)		280	280	280
Depth (mm)		120	120	120
1 Pole Weight (kg)		-	-	-
3 Pole Weight (kg)		19.8	19.8	18.2
4 Pole Weight (kg)		25	25	23.4
Operation				
Direct Opening Action		Yes	Yes	Yes
Trip Button		Yes	Yes	Yes
Suitable for Isolation		Yes	Yes	Yes
Panel mounted rotary handle		Optional	Optional	Optional
Direct mounted rotary handle		-	-	-
Slide Interlock		Optional	Optional	Optional
Link Interlock		Optional	Optional	Optional
Wire Interlock		Optional	Optional	Optional
Motor Actuator		Optional	Optional	Optional
Endurance at 690V AC	Electrical (cycles)	4,000	4,000	4,000
	Mechanical (cycles)	5,000	5,000	5,000
Environment				
Operating Ambient Temperature	°C	-5 to +50	-5 to +50	-5 to +50
Relative Humidity	%	85	85	85
Altitude above Sea Level	Metres	Up to 2000	Up to 2000	Up to 2000
Pollution Degree		3	3	3
Approval Marks				
CE, UKCA		Yes	Yes	Yes

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Zs VALUES

MCCB REFERENCE	Short time (I _{sd}) Protection Setting	Maximum Zs values @ 230Vac		
		In	0.4 sec	5 sec
YA7 3P & 4P (Electronic)	MIN	1250	0.061	0.061
YA7H-E - 50kA YA7K-E - 70kA	MAX		0.015	0.015

3 & 4 pole time/current characteristic For electronic protection.



$I_n = 1250A$

		I_R (A)									
		LTD Pick-up current	I_R	x/I_n	0.4	0.5	0.63	0.8	0.9	0.95	1.0
Standard	LT	t_R	(s)		11	21	21	5	10	19	29
	ST	I_{sd}	x/I_R		at 200% x I_R			at 600% x I_R			
		t_{sd}	(s)		2.5		5		10		
	INST	I_i	x/I_n		14(Max: 12 x I_n) Note (1)						
Option	PTA	I_p	x/I_R		0.8						
		t_p	(s)		40						
	GF Note(3)	I_g	x/I_n		0.2						
		t_g	(s)		0.2						
	NP	I_N	x/I_R		1.0/0.5 Note(2)						
	t_N	(s)		$I_N = I_R$							

Note

(1) I_i max. = 12 x I_n . (2) 1.0 x I_R or 0.5 x I_R can be selected. Characteristic of neutral protection (t_N vs. I_N) is identical to characteristic of phase protection (t_R vs. I_R). (3) When you specify GF on MCCBs with 3 poles the terminal block is automatically fitted to connect with the external neutral CT for 3 phases 4 wires system. See terminal blocks in section 4.