

## LOADLINE YB3 MCCB

### Main Features

- Exceeds the requirements of EN 60947-2
- Three-pole and four-pole MCCBs have adjustable thermal and magnetic overloads
- Thermal overload adjusts to  $1 \times I_n$ ,  $0.8 \times I_n$  and  $0.63 \times I_n$
- Ultimate breaking capacity available as 25kA and 40kA at 415VAC
- Maximum cable termination is 120mm<sup>2</sup> with cable clamps (optional accessory)
- Maximum cable termination is 150mm<sup>2</sup> with M8 reduced palm width cable lugs
- Standard cable termination is 95mm<sup>2</sup> using M8 lugs
- Rated insulation voltage is 690V AC (Ui)



### CATALOGUE NUMBERS

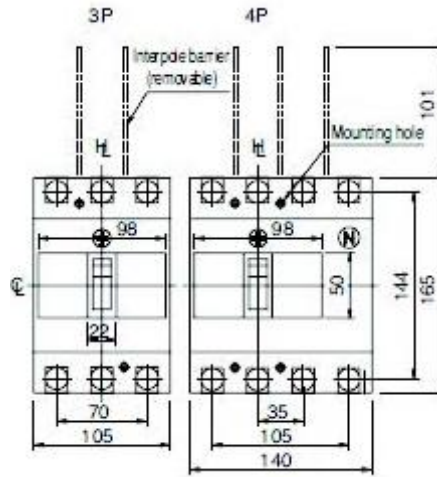
CURRENT RATING		Cat No (3 pole)	Cat No (4 pole)
MAX (A)	MIN (A)		
<b>Switch Disconnector</b>			
250	-	YB3B3P250D	YB3B4P250D

#### YB3 Frame MCCB Thermal / Magnetic - Icu 25kA

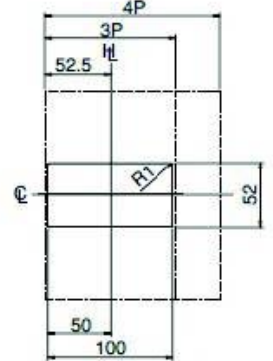
50	32	YB3N3P50T*	YB3N4P50T*
63	40	YB3N3P63T*	YB3N4P63T*
100	63	YB3N3P100T	YB3N4P100T
125	80	YB3N3P125T	YB3N4P125T
160	100	YB3N3P160T	YB3N4P160T
200	125	YB3N3P200T	YB3N4P200T
250	160	YB3N3P250T	YB3N4P250T

#### YB3 Frame MCCB Thermal / Magnetic - Icu 40kA

50	32	YB3S3P50T*	YB3S4P50T*
63	40	YB3S3P63T*	YB3S4P63T*
100	63	YB3S3P100T	YB3S4P100T
125	80	YB3S3P125T	YB3S4P125T
160	100	YB3S3P160T	YB3S4P160T
200	125	YB3S3P200T	YB3S4P200T
250	160	YB3S3P250T	YB3S4P250T

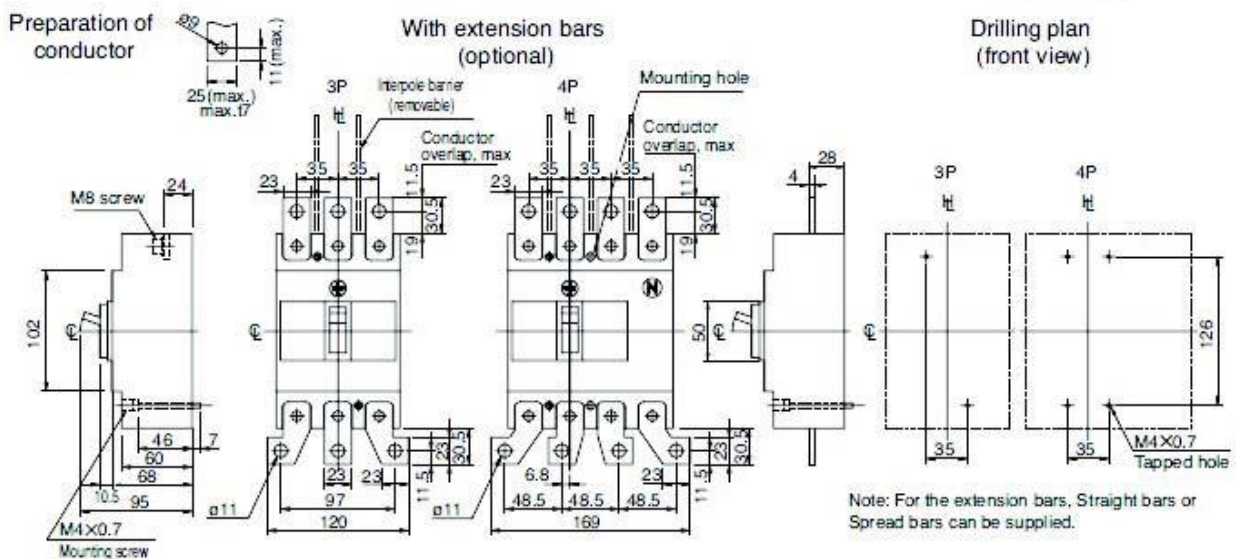


Panel cutout (front view)



Panel cutout dimensions shown give an allowance of 1.0mm around the handle escutcheon.

\* 50A and 63A YB3 Frame MCCBs have fixed magnetic overload.



Note: For the extension bars, Straight bars or Spread bars can be supplied.

## LOADLINE YB3 MCCB

### YB3 MCCB ACCESSORIES

DESCRIPTION	Cat No (3 pole)	Cat No (4 pole)
<b>Cable Clamps</b> YB3 Cable clamps (120mm <sup>2</sup> cable)	YB3CC3P	YB3CC4P
<b>Extension Terminals</b> YB3 Flat extension terminals (Straight type) YB3 Flat extension terminals (Spread type)	YB3XT3P YB3XTS3P	YB3XT4P YB3XTS4P
<b>Rear Terminals</b> YB3 Rear terminals	YB3RT3P	YB3RT4P
<b>Motors and Interlocks</b> YB3 Motor actuator 100-110V AC YB3 Motor actuator 200-220V AC YB3 Motor actuator 230-240V AC YB3 Motor actuator 24V DC YB3 Motor actuator 48V DC YB3 Motor actuator 100-110V DC	<b>Standard</b> YB3MA110 YB3MA220 YB3MA240 YB3MA24DC YB3MA48DC YB3MA110DC	<b>Auto Reset</b> YB3MA110R YB3MA220R YB3MA240R YB3MA24DCR YB3MA48DCR YB3MA110DCR
<b>Slide Interlock</b> YB3 Slide interlock for front/rear connections	YB3MS3P	YB3MS4P
<b>Rotary Handles</b> YB3 Panel mounted IP54 rotary handle for 453mm panel depth Castell cam for panel mounted rotary handle	YB3RH453 YABCLCAM	YB3RH453 YABCLCAM
<b>Terminal Protection</b> YB3 Terminal shroud for cable lugs YB3 Terminal cover for rear terminals YB3 Terminal shroud for cable clamps YB3 Interphase barrier (Set of 1) YB Terminal shroud cover lock * YB1 (1,3 and 4-pole) & YB3 (3 & 4-pole) Handle lock *	YB3TS3P YB3TC3P YB3TS3PS YB3TB YB3TSCL YBDL1	YB3TS4P YB3TC4P YB3TS4PS YB3TB YB3TSCL YBDL1
<b>Auxiliary and Alarm Switches</b> YB Auxiliary changeover switch (AC 250/0.1A and DC 125V/0.4A) * YB Alarm trip indicator changeover switch (AC 250/0.1A and DC 125V/0.4A) *	YBAUX1 YBAL	YBAUX1 YBAL
<b>Shunt Trips</b> YB Shunt trip 100-120V AC * YB Shunt trip 200-240V AC * YB Shunt trip 380-450V AC * YB Shunt trip 24V DC * YB Shunt trip 48V DC * YB Shunt trip 100-120V DC * YB Shunt trip 200-240V DC *	YBST120AC YBST240AC YBST450AC YBST24DC YBST48DC YBST120DC YBST240DC	YBST120AC YBST240AC YBST450AC YBST24DC YBST48DC YBST120DC YBST240DC
<b>Under-voltage Release</b> YB Under-voltage release 100-120V AC * YB Under-voltage release 200-240V AC * YB Under-voltage release 380-450V AC * YB Under-voltage release 24V DC * YB Under-voltage release 100-120V DC * YB Under-voltage release 200-240V DC *	YBUVR120AC YBUVR240AC YBUVR450AC YBUVR24DC YBUVR120DC YBUVR240DC	YBUVR120AC YBUVR240AC YBUVR450AC YBUVR24DC YBUVR120DC YBUVR240DC



#### Accessories

YB3 Neutral link YB3NL -----

**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. \* Common accessories for YB1 and YB3 frame MCCBs.

## LOADLINE YB3 MCCB

Dorman Smith Frame Size		YB3		
MCCB Type or Sw. Disconnecter		ADJUSTABLE MCCB's		SWITCH DISCONNECTOR
Terminal Type		Front	Front	Front
Product Code		YB3N----T	YB3S----T	YB3B----D
No of Poles		3, 4	3, 4	3, 4
Nominal Current Ratings (In) (A) (50°C)		50, 63, 100, 125, 160, 200, 250	50, 63, 100, 160, 200, 250	250
<b>Electrical Characteristics</b>				
Rated Operational Voltage (Ue) (V)	AC 50/60Hz	525	690	690
	DC	250	250	250
Rated Insulation Voltage (Ui) (V)		800	800	800
Rates Impulse Withstand Voltage (Uimp) (kV)		8	8	8
Ultimate breaking capacity (Icu) (kA) (IEC, JIS, AS/NZS)	690V AC	-	4	-
	525V AC	7.5	10	-
	440V AC	15	30	-
	380/400/415V AC	25	40	-
	240V AC	35	85	-
	250V DC	15	25	-
Service breaking capacity (Ics) (kA)	690V AC	-	4	-
	525V AC	6	7.5	-
	440V AC	12	15	-
	380/400/415V AC	19	20	-
	240V AC	27	43	-
	250V DC	12	13	-
Rated breaking Capacity (NEMA) (kA)	480V AC	10	25	-
	240V AC	35	85	-
Rated short-circuit making capacity (Icm) (kA)	Peak	-	-	6
Rated short-time withstand current (Icw) (kA)	rms	-	-	3 (0.3 sec)
Rated Frequency	Hz	50/60	50/60	50/60
<b>Protection</b>				
Adjustable Thermal		Yes	Yes	-
Adjustable Magnetic		Yes*	Yes*	-
Microprocessor				
Utilisation Category		A	A	A
IP Rating	Terminals	IP20	IP20	IP20
	Toggle	IP30	IP30	IP30
<b>Installation</b>				
Front Connection		Standard	Standard	Standard
Straight Extension Terminals		Optional	Optional	Optional
Spread Extension Terminals		Optional	Optional	Optional
Cable Clamps		Optional	Optional	Optional
Rear Terminals		Optional	Optional	Optional
DIN-rail Mounting		Not available	Not available	Not available
Plug-in		Not available	Not available	Not available
Draw-out		Not available	Not available	Not available
<b>Dimensions</b>				
Height (mm)		165	165	165
1 Pole Width (mm)		-	-	-
3 Pole Width (mm)		105	105	105
4 Pole Width (mm)		140	140	140
Depth (mm)		66	66	68
1 Pole Weight (kg)		-	-	-
3 Pole Weight (kg)		1.5	1.5	1.5
4 Pole Weight (kg)		1.9	1.9	1.9
<b>Operation</b>				
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		Optional	Optional	Optional
Slide Interlock		Optional	Optional	Optional
Link Interlock		Not available	Not available	Not available
Wire Interlock		Not available	Not available	Not available
Motor Actuator		Optional	Optional	Optional
Endurance at 415V AC	Electrical (cycles)	6,000	6,000	6,000
	Mechanical (cycles)	18,000	18,000	18,000
<b>Environment</b>				
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
<b>Approval Marks</b>				
CE		Yes	Yes	Yes
Direct Opening Action		Yes	Yes	Yes

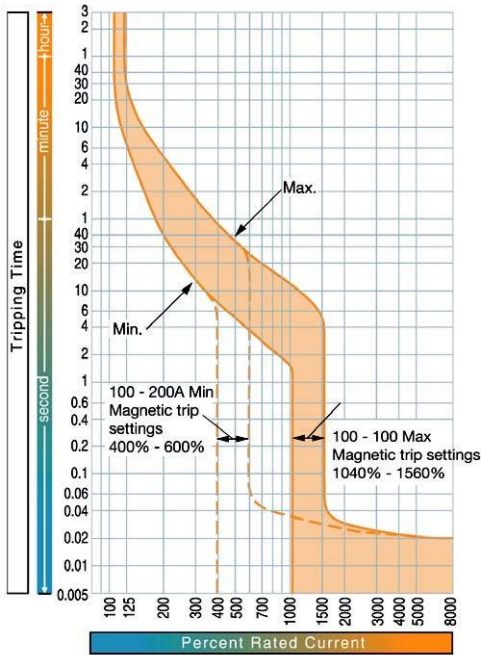
\* 50A and 63A have fixed magnetic trip instantaneous trip

## LOADLINE YB3 MCCB

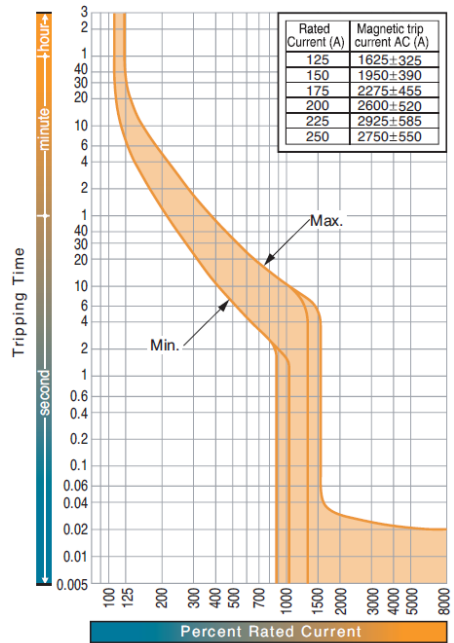
### Zs VALUES

MCCB REFERENCE	Instantaneous (Ii) Protection Setting	Maximum Zs values @ 230Vac		
		In	0.4 sec	5 sec
YB3 3P & 4P Thermal/Mag	FIXED	50	0.280	0.280
	FIXED	63	0.222	0.222
	MIN	100	0.303	0.303
	MAX		0.140	0.140
YB3N - 25kA YB3S - 40kA	MIN	125	0.243	0.243
	MAX		0.112	0.112
	MIN	160	0.190	0.190
	MAX		0.088	0.088
	MIN	200	0.152	0.152
	MAX		0.070	0.070
	MIN	250	0.146	0.146
	MAX		0.066	0.066

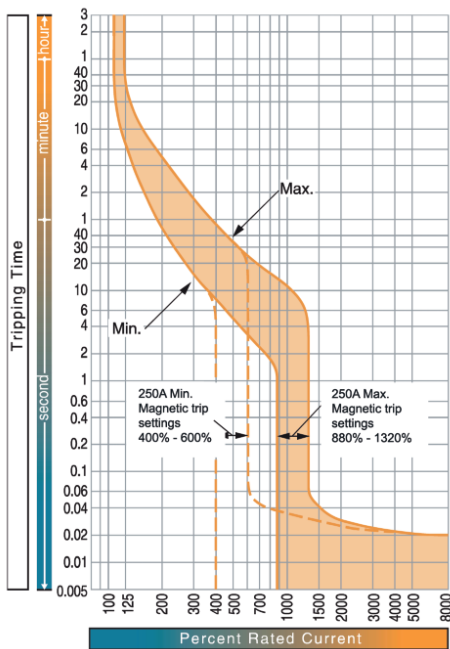
3 & 4 pole time/current characteristic  
 For 100A to 200A adjustable  
 thermal/adjustable magnetic



3 & 4 pole time/current characteristic  
 Fixed thermal/Fixed magnetic



3 & 4 pole time/current characteristic  
 For 250A adjustable  
 thermal/adjustable magnetic



Energy Let Through

