

## 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

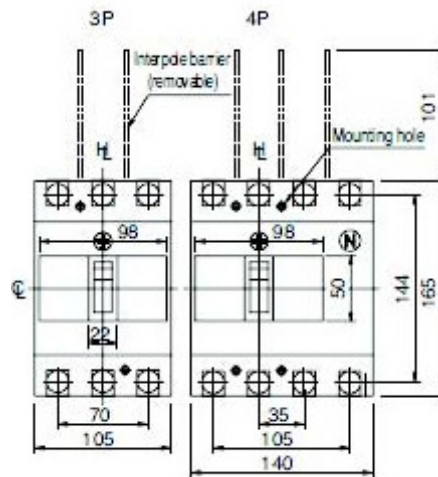
CURRENT RATING		Cat No (3 pole)	Cat No (4 pole)
MAX (A)	MIN (A)		
<b>Switch Disconnector</b>			
250	-	YB3B3P250D	YB3B4P250D

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

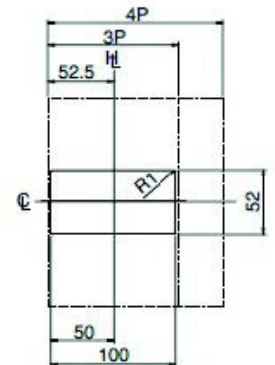
50	32	YB3N3P50T*	YB3N4P50T*
63	40	YB3N3P63T*	YB3N4P63T*
100	63	YB3N3P100T	YB3N4P100T
125	80	YB3N3P125T	YB3N4P125T
160	100	YB3N3P160T	YB3N4P160T
200	125	YB3N3P200T	YB3N4P200T
250	160	YB3N3P250T	YB3N4P250T

#### 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

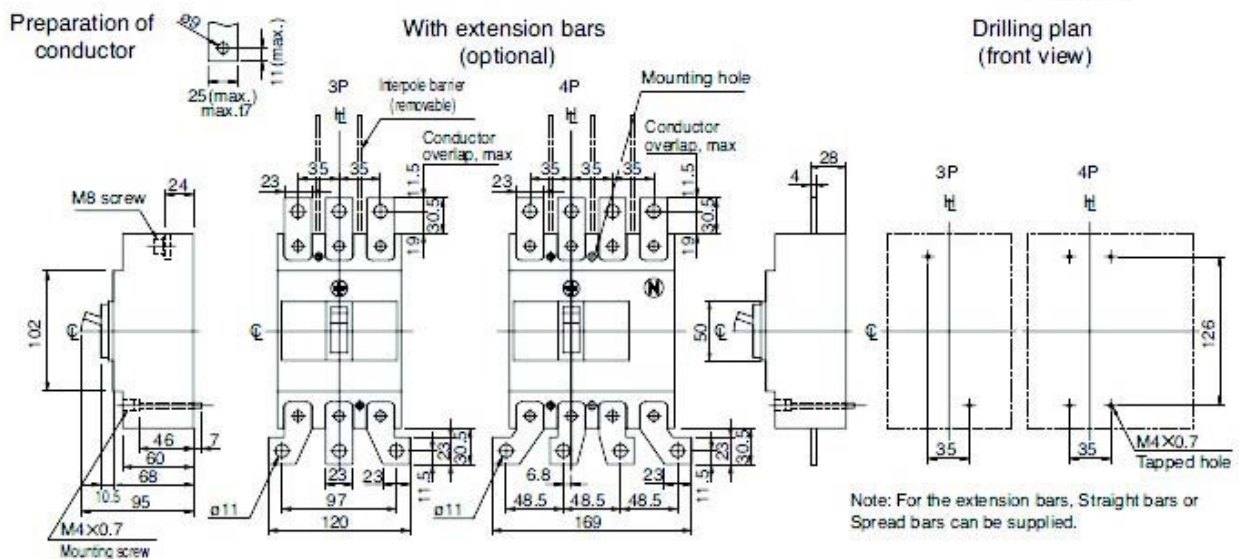


Panel cutout (front view)



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)

##### Cable Clamps

YB3 Cable clamps (120mm<sup>2</sup> cable)

YB3CC3P

YB3CC4P



##### Extension Terminals

YB3 Flat extension terminals (Straight type)

YB3XT3P

YB3XT4P

YB3 Flat extension terminals (Spread type)

YB3XTS3P

YB3XTS4P



##### Rear Terminals

YB3 Rear terminals

YB3RT3P

YB3RT4P



##### Motors and Interlocks

YB3 Motor actuator 100-110V AC

##### Standard

YB3MA110

##### Auto Reset

YB3MA110R

YB3 Motor actuator 200-220V AC

YB3MA220

YB3MA220R

YB3 Motor actuator 230-240V AC

YB3MA240

YB3MA240R

YB3 Motor actuator 24V DC

YB3MA24DC

YB3MA24DCR

YB3 Motor actuator 48V DC

YB3MA48DC

YB3MA48DCR

YB3 Motor actuator 100-110V DC

YB3MA110DC

YB3MA110DCR



##### Slide Interlock

YB3 Slide interlock for front/rear connections

YB3MS3P

YB3MS4P

##### Rotary Handles

YB3 Panel mounted IP54 rotary handle for

453mm panel depth

YB3RH453

YB3RH453

Castell cam for panel mounted rotary handle

YABCLCAM

YABCLCAM



##### Terminal Protection

YB3 Terminal shroud for cable lugs

YB3TS3P

YB3TS4P

YB3 Terminal cover for rear terminals

YB3TC3P

YB3TC4P

YB3 Terminal shroud for cable clamps

YB3TS3PS

YB3TS4PS

YB3 Interphase barrier (Set of 1)

YB3TB

YB3TB

YB Terminal shroud cover lock \*

YB3TSCL

YB3TSCL

YB1 (1,3 and 4-pole) & YB3 (3 & 4-pole) Handle lock \*

YBDL1

YBDL1



##### Auxiliary and Alarm Switches

YB Auxiliary changeover switch

(AC 250/0.1A and DC 125V/0.4A) \*

YBAUX1

YBAUX1

YB Alarm trip indicator changeover switch

(AC 250/0.1A and DC 125V/0.4A) \*

YBAL

YBAL

##### Shunt Trips

YB Shunt trip 100-120V AC \*

YBST120AC

YBST120AC

YB Shunt trip 200-240V AC \*

YBST240AC

YBST240AC

YB Shunt trip 380-450V AC \*

YBST450AC

YBST450AC

YB Shunt trip 24V DC \*

YBST24DC

YBST24DC

YB Shunt trip 48V DC \*

YBST48DC

YBST48DC

YB Shunt trip 100-120V DC \*

YBST120DC

YBST120DC

YB Shunt trip 200-240V DC \*

YBST240DC

YBST240DC



##### Under-voltage Release

YB Under-voltage release 100-120V AC \*

YBUVR120AC

YBUVR120AC

YB Under-voltage release 200-240V AC \*

YBUVR240AC

YBUVR240AC

YB Under-voltage release 380-450V AC \*

YBUVR450AC

YBUVR450AC

YB Under-voltage release 24V DC \*

YBUVR24DC

YBUVR24DC

YB Under-voltage release 100-120V DC \*

YBUVR120DC

YBUVR120DC

YB Under-voltage release 200-240V DC \*

YBUVR240DC

YBUVR240DC

##### Accessories

YB3 Neutral link

YB3NL

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**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, UKCA		Yes	Yes	Yes
Direct Opening Action		Yes	Yes	Yes

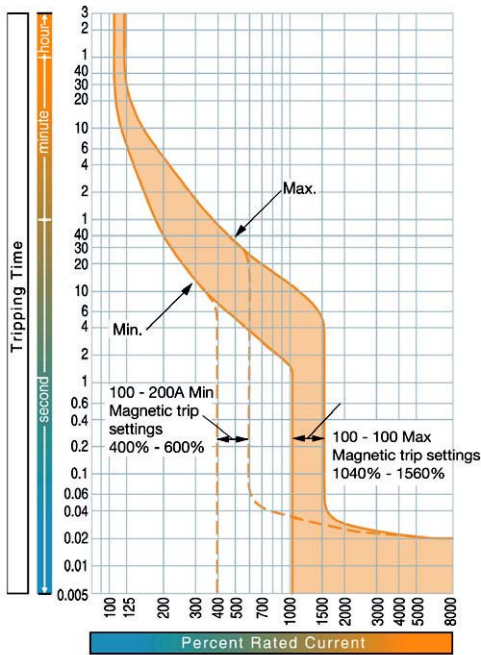
\* 50A and 63A have fixed magnetic trip instantaneous trip

## LOADLINE YB3 MCCB

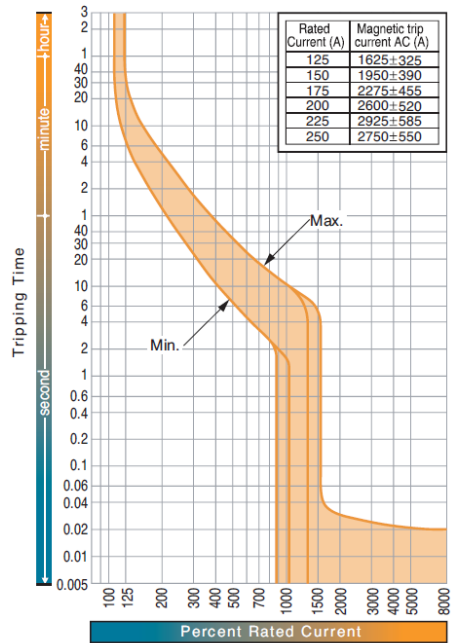
### Zs VALUES

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	MIN	125	0.243	0.243
	MAX		0.112	0.112
YB3S - 40kA	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

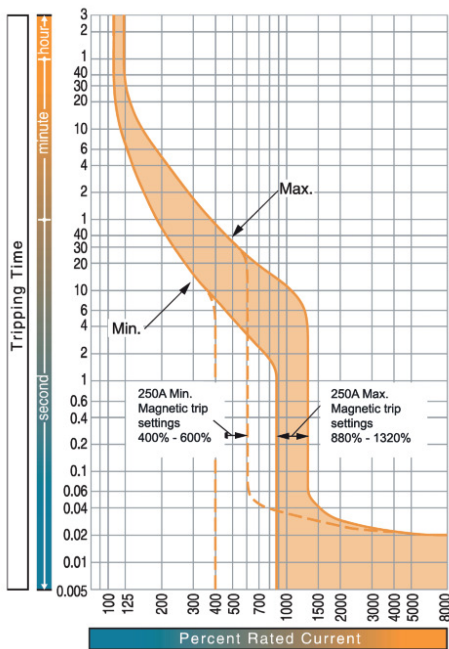
3 & 4 pole time/current characteristic  
 For 100A to 200A adjustable  
 thermal/adjustable magnetic



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

