

## Metasol Molded Case Circuit Breaker

### ABN53c



#### General

Product code	0129006500
Product description	ABN53c 20A EXP
Trip Unit	FTU(Fixed-thermal, Fixed-magnetic)
[In] rated current	20 A at 40 °C
Poles description	3P
Protected poles description	3T
Neutral position	-
Network type	AC (50/60 Hz), DC
Upside connection	Front (screw)
Downside connection	Front (screw)

#### Characteristics

[Ue] rated operational voltage (AC 50/60 Hz)	690 V AC
[Ue] rated operational voltage (DC)	500 V DC
[Uimp] rated impulse withstand voltage	8 kV
[Ui] rated insulation voltage	1000 V
Mechanical durability	25000 cycles
Electrical durability (AC)	10000 cycles

Electrical durability (DC)	-
Utilisation category	Category A
Suitability for isolation	Yes
Reference standard	IEC 60947-2
[Icu] rated Ultimate short-circuit breaking capacity	30 kA at 220/250 V AC 50/60 Hz, IEC 60947-2
	18 kA at 380 V AC 50/60 Hz, IEC 60947-2
	14 kA at 415/460 V AC 50/60 Hz, IEC 60947-2
	7.5 kA at 480/500 V AC 50/60 Hz, IEC 60947-2
	2.5 kA at 690 V AC 50/60 Hz, IEC 60947-2
	-
	5 kA at 500 V DC (3poles in series), Reference
	-
[Ics] rated service breaking capacity	30 kA at 220/250 V AC 50/60 Hz, IEC 60947-2
	18 kA at 380 V AC 50/60 Hz, IEC 60947-2
	14 kA at 415/460 V AC 50/60 Hz, IEC 60947-2
	7.5 kA at 480/500 V AC 50/60 Hz, IEC 60947-2
	2.5 kA at 690 V AC 50/60 Hz, IEC 60947-2
	-
	5 kA at 500 V DC (3poles in series), Reference
	-
[Icm] rated short-circuit marking capacity	63 kA at 220/250 V AC 50/60 Hz, IEC 60947-2
	36 kA at 380 V AC 50/60 Hz, IEC 60947-2
	28 kA at 415/460 V AC 50/60 Hz, IEC 60947-2
	12.75 kA at 480/500 V AC 50/60 Hz, IEC 60947-2
	3.75 kA at 690 V AC 50/60 Hz, IEC 60947-6
	-
[Icw] rated short-time	-
	-
	-

withstand current	-
	-
Trip unit characteristics	Thermal-magnetic
	L : for overload protection (long time)
	-
	I : for instantaneous short-circuit protection
	-
	-
	-
	-
	-
[Ir] Long-time pick-up adjustment range	Fixed
[Iu] Long-time pick-up adjustment range	-
	-
[tr] Long-time delay adjustment range	-
	-
[Isd] Short-time pick-up adjustment range	-
	-
[tsd] Short-time delay adjustment range	-
	-
	-
	-
	-
	-
	-
[Ii] Instantaneous pick-up adjustment range	Fixed
	400 A, tolerance $\pm 20\%$

[I <sub>g</sub> ] Ground-fault protection pick-up adjustment range	-
	-
[t <sub>g</sub> ] Ground-fault protection time delay adjustment range	-
	-
	-
	-
	-
	-
Earth leakage pick-up adjustment range	-
	-
Earth leakage alarm time delay adjustment range	-
	-
Earth leakage trip time delay adjustment range	-
	-
[I <sub>p</sub> ] Pre-trip alarm pick-up adjustment range	-
	-
[t <sub>p</sub> ] Pre-trip alarm time delay adjustment range	-
	-
Alarm LED	-
	-

### Environment

Pollution degree	3, IEC 60664-1
Degree of protection	IP20, IEC 60529
Ambient air temperature for operation	-20...70 °C
Ambient air temperature for storage	-40...70 °C
Mounting mode	Fixed
Mounting support	Backplate

Approvals <sup>1)</sup> (General)	CE (Europe)
	-
	-
	CCC (China)
	EAC (Russia)
	IC (Korea)
Approvals (Marine)	LR (U.K)
	BV (France)
	ABS (U.S.A)
	GL (Germany)
	DNV (Norway)
	RINA (Italy)
	KR (Korea)

1) LS ELECTRIC's standard products are designed for CE.

To check the product with regional certificates, please contact LSE sales representatives.

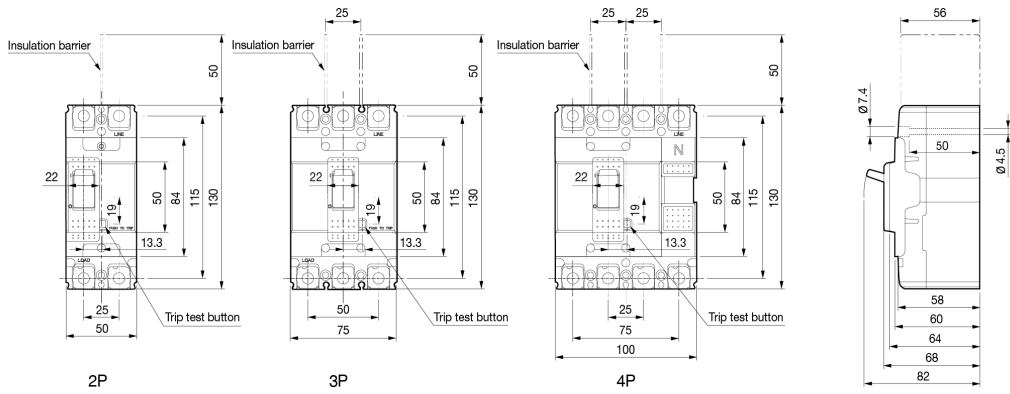
## Dimensions

Product	Width	75 mm
	Height	130 mm
	Depth	60 mm
	Weight	0.7 kg
Packing	Width	435 mm
	Height	565 mm
	Depth	105 mm
	Weight	15.8 kg
	Quantity (in a box)	20 pcs.

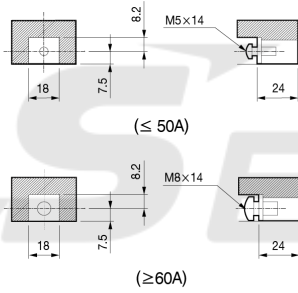
# MCCB

ABN50c	ABS30c
ABN60c	ABS50c
ABN100c/100e	ABS60c

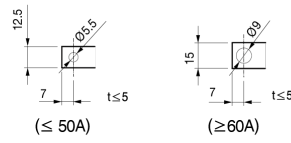
(Unit: mm)



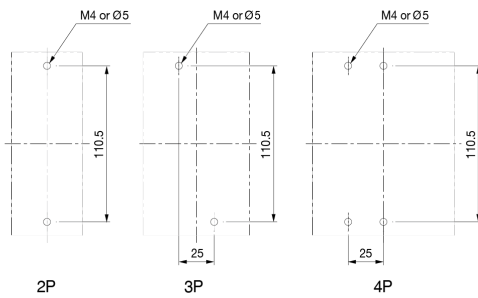
## Terminal details



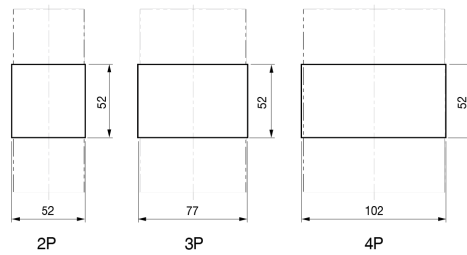
## Connecting



## Panel drilling



## Front panel cutting



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