

## MOULDED CASE CIRCUIT BREAKERS (MCCB)

### DS1 series to 1600A

### ELECTRONIC TYPE



### Functions:

- switching on/off heavy loaded electrical circuits
- breaking of electrical circuits and control of powerful consumers
- can be used as a main breaker in housing or industrial distributing installations
- endures high currents of short circuit in the protected circuit
- remarkable with high reliability of current characteristics
- control: manual
- possibilities for electrical module parameters adjustment through direct modules (combination of keys) thus providing accurate protection from overload and short circuit
- simultaneous protection of the three phases
- possibility for auxiliary devices mounting for automation
- contactor for TT test 15V DC

<b>Technical data:</b>	
<b>Rated operating voltage:</b>	415/690V; 50/60Hz
<b>Isolating voltage:</b>	2000V
<b>Surge voltage wear resistance:</b>	≥8000V
<b>Joining terminal:</b>	flat (tunnel) screw terminal
<b>Connecting:</b>	<ul style="list-style-type: none"><li>▪ rigid or flexible conductors</li><li>▪ front conductors joining</li><li>▪ possibility for mounting to lengthening terminal</li></ul>
<b>Abnormal heating wear resistance and fire of the outer parts:</b>	960°C
<b>Electrical wear resistance (number of cycles):</b>	≥10000
<b>Mechanical wear resistance (number of cycles):</b>	≥20000
<b>IP code:</b>	IP>20
<b>Plastic material of UV rays and non- flammable</b>	
<b>Test button</b>	
<b>Ambient temperature:</b>	-20°÷65°C

## Mounting:

- vertical on a smooth surface using bolts

## Advantages:

- Wide range of auxiliary devices
- Easy adjustment of the electronic device
- High reliability and efficiency
- High electrical and mechanical wear resistance
- Compact size
- Easy mounting and installation

## Applications:

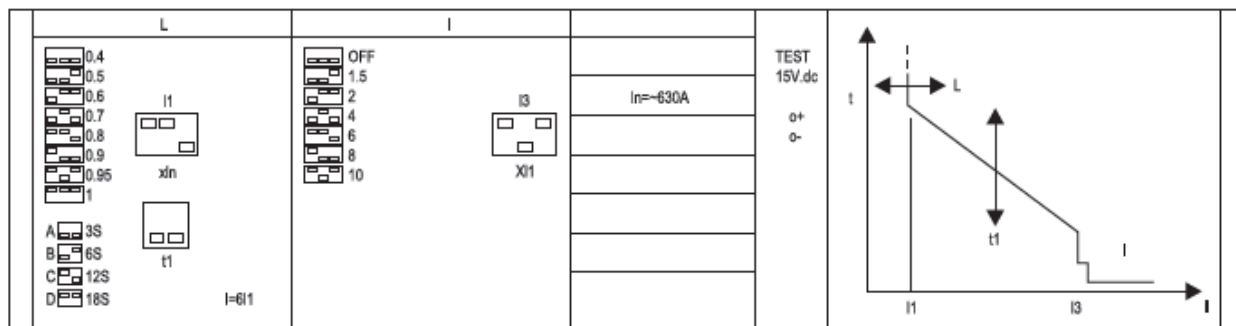
- Residential buildings
- Administrative buildings
- Commercial property
- Industrial applications
- Distribution boards

## Protecting functions:

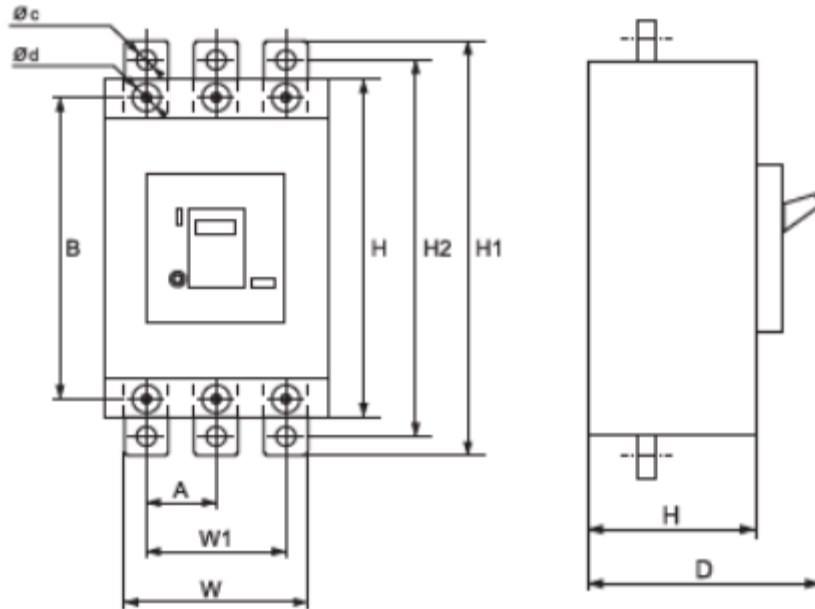
Function L – step adjustment for protection against overload. Adjustment of the operating current  $I1=0.4+1xIn$  with discrete coefficients as the value can be 0.4; 0.5; 0.6; 0.7; 0.8; 0.9; 0.95 and 1

Time delay adjustment  $t1$  of the protection against overload – step adjustment with four values A-3s; B-6s; C- 12s; D-18s when current is  $I=6I1$ . The diagram of the current curves is presented on fig.1

Adjustment of the transitory protection current against short circuit  $I3=X \times I1$  where X can take discrete value OFF; 1.5; 2; 4; 6; 8; 10



## Dimensions:



Dimensions  
(mm)

Type	W	H	D	H1	D1	A	B	W1	H2	$\varnothing d$	$\varnothing c$
DS1-400E	140	257	104	316	144	44	214	87.5	285	6	11
DS1-630E	210	275	104	310	172	70	230	140	280	6	11
DS1-800E	210	275	104	347	172	70	230	140	307	6	16
DS1-1600E	210	410	140	410	210	70	300	140	350	10	12

## Basic data:

Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm <sup>2</sup> )	Packing/ Box (pcs)	Catalogue number three-poles
			415V	690V				
DS1-400E	400	50	65	25	160-400	240	1 / 3	44940
DS1-630E	630	65	75	25	252-630	240	1 / 2	44963
DS1-800E	800	65	75	30	320-800	240	1 / 2	44980
DS1-1250E	1000	85	100	65	400-1000	240	1 / 1	44999
DS1-1250E	1250	85	100	65	500-1250	240	1 / 1	44925
DS1-1600E	1600	85	100	65	640-1600	240	1 / 1	44960

## Standards:

- EN 60947-1
- EN 60947-2

