

TECHNICAL SPECIFICATION

Moulded case circuit breakers (MCCB) DS1 series from 40...1250A



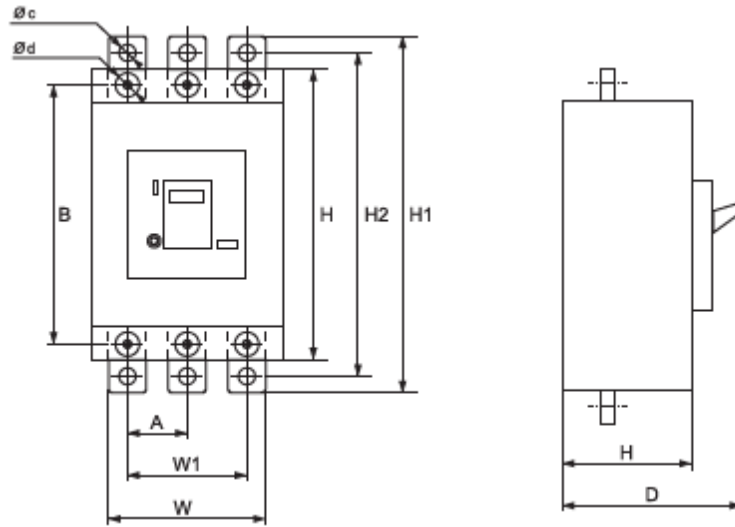
Functions:

- 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
- possibility for auxiliary devices mounting for automation

Technical data:

- Rated operating voltage: 690V; 50/60Hz
- Isolating voltage: 2000V
- Surge voltage wear resistance: $\geq 8000V$
- Joining terminal: flat (tunnel) screw terminal for the breakers up to 160A and a bolt connection for the breakers from 250A to 1600A
- Connecting:
 - rigid or flexible conductors
 - front conductors joining
 - possibility for mounting to lengthening terminal
- Plastic elements
 - Not keeping the burning material nylon PA66
 - Box permittivity strength: $>16MV/m$
- Abnormal heating wear resistance and fire of the outer parts: 960°C
- Static contacts – alloy: pure copper T2Y2
 - contact head: silver graphite CAg(5)
 - thickness: depends on the current
- Tightening moment: 1.33Nm
- Electrical wear resistance (number of cycles): ≥ 10000
- Mechanical wear resistance (number of cycles): ≥ 20000
- IP code: IP>20
- Mounting:
 - Joining with bolts
 - Mounting position: vertical
- Plastic material of UV rays and non-flammable
- Test button
- Ambient temperature: $-20^{\circ} \div 65^{\circ}C$

Dimensions:



Type	W	H	D	H1	D1	A	B	W1	H2	$\varnothing d$	$\varnothing e$
DS1-125/3P	76.2	120	70		90	25	100	50		4	
DS1-160/3P	90	120	70		93	30	100	60		5	
DS1-250/3P	105	170	104	238	143.5	35	139	70	210	6	8.5
DS1-400/3P	140	257	104	316	144	44	214	87.5	285	6	11
DS1-630/3P	210	275	104	310	172	70	230	140	280	6	11
DS1-800/3P	210	275	104	347	172	70	230	140	307	6	16
DS1-1600/3P	210	410	140	410	210	70	300	140	350	10	12
DS1-125/4P	110	120	70		90	25	100	50		4	
DS1-160/4P	120	120	70		93	30	100	60		5	
DS1-250/4P	140	170	104	238	143.5	35	139	70	210	6	8.5
DS1-400/4P	184	257	104	316	144	44	214	87.5	285	6	11
DS1-630/4P	280	275	104	310	172	70	230	140	280	6	11
DS1-800/4P	280	275	104	347	172	70	230	140	307	6	16
DS1-1600/4P	280	410	140	410	210	70	300	140	350	10	12

Variants:

DS1-125



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packaging / Box (pcs)	Catalogue number three-poles	Catalogue number four-poles
			415V	690V					
DS1-125	40	16	35	10	fixed	16	1 / 20	44040	444040
DS1-125	50	16	35	10	fixed	16	1 / 20	44050	444050
DS1-125	63	16	35	10	fixed	25	1 / 20	44063	444063
DS1-125	80	16	35	10	fixed	25	1 / 20	44080	444080
DS1-125	100	16	35	10	fixed	35	1 / 20	44090	444090
DS1-125	125	16	35	10	fixed	50	1 / 20	44125	444125

DS1 – 160



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packin g / Box (pcs)	Catalogue number three-poles	Catalogu e number four-poles
			415V	690V					
DS1-160	63	22	35	15	44 – 63	25	1 / 16	44163	444163
DS1-160	80	22	35	15	56 – 80	25	1 / 16	44164	444164
DS1-160	100	22	35	15	70 – 100	50	1 / 16	44165	444165
DS1-160	125	22	35	15	88 – 125	50	1 / 16	44166	444166
DS1-160	160	22	35	15	112 - 160	70	1 / 16	44160	444160
DS1-160	160	22	35	15	fixed	70	1 / 16	441601	-

DS1 – 250



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packin g / Box (pcs)	Catalogue number three-poles	Catalogu e number four-poles
			415V	690V					
DS1-250	200	35	50	15	140 - 200	120	1 / 6	44200	444200
DS1-250	250	35	50	15	175 - 250	120	1 / 6	44250	444250

DS1 – 400



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packaging / Box (pcs)	Catalogue number three-poles	Catalogue number four-poles
			415V	690V					
DS1-400	315	50	65	25	fixed	240	1 / 3	44315	444315
DS1-400	400	50	65	25	fixed	240	1 / 3	44401	444401

DS1 – 630



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustment (A)	Section of the conductor (mm ²)	Packing / Box (pcs)	Catalogue number three-poles	Catalogue number four-poles
			415V	690V					
DS1-630	500	65	75	25	fixed	185	1 / 2	44500	444500
DS1-630	630	65	75	25	fixed	185	1 / 2	44630	444630
DS1-800	800	75	85	30	fixed	240	1 / 2	44800	444800

DS1-1250



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)	Protection from overload	Section of the conductor (mm ²)	Packing / Box (pcs)	Catalogue number three-poles
DS1-1250	1000	85	65	fixed	240	1 / 1	44000
DS1-1250	1250	85	65	fixed	240	1 / 1	44502

Moulded case circuit breakers (MCCB) DS1 with lock



Type	Rated current In (A)	Operating breaking capacity Ics (kA)	Maximum breaking capacity Icu (kA)		Thermal current adjustmen t (A)	Section of the conductor (mm ²)	Packin g / Box (pcs)	Catalogue number three- poles
			415V	690V				
DS1-125	125	16	35	10	fixed	25	1 / 20	44163K
DS1-160	160	35	50	15	125 – 160	25	1 / 16	44160K
DS1-250	250	35	50	15	160 – 250	50	1 / 6	44250K
DS1-400	400	50	65	25	fixed	50	1 / 3	44401K
DS1-630	630	65	75	25	fixed	185	1 / 2	44630K
DS1-800	800	75	85	30	fixed	240	1 / 2	44800K

Standards:

EN 60947-1