

# LOW VOLTAGE POWER CAPACITORS

## HD - Heavy Duty

Three phase power capacitors for Power Factor Correction

### General Technical Parameters

Standards	IEC EN 60831-1/2, VDE 0560-46/47, GOST 1282-88
Rated Voltage	230 - 800 V / 50 Hz
Rated Power	1 - 50 kvar
Capacitance Tolerance	-5 / +10 %
Max. Permissible Current	1,5 x I <sub>N</sub> Continuous, 2 x I <sub>N</sub> Short period *
Max. inrush Current	400 x I <sub>N</sub>
Capacitor Losses	cca 0,4 W / kvar
Discharge Resistors	built-in 75 V / 3 min (50 V / 1 min up to 30 kvar)
Statistical Life Expectancy	> 150 000 hours according to operating conditions
Protection Degree	IP 20 (IP 54 selected types on request)
Max. Relative humidity	95 %
Cooling	Natural Air or forced
Max. Altitude	4 000 m
Mounting position	Any position
Case	Aluminium can
Dielectric System	Dry metallized polypropylene, selfhealing
Impregnant / Filling	Inert gas N <sub>2</sub> or semi-dry resin (50 kvar)
Safety Device	3 Fuses overpressure disconnecter
Terminals	One side - 3 clamps



Note: \* Maximum current for 48 hours continuous operation with relation to highest mean ambient temperature of 45°C over period of 24 h.

### Permitted Overvoltages

RMS overvoltage	Max. period
1,1 x U <sub>N</sub>	8 h/d
1,15 x U <sub>N</sub>	30 min/d
1,20 x U <sub>N</sub>	5 min (200x)
1,30 x U <sub>N</sub>	1 min (200x)

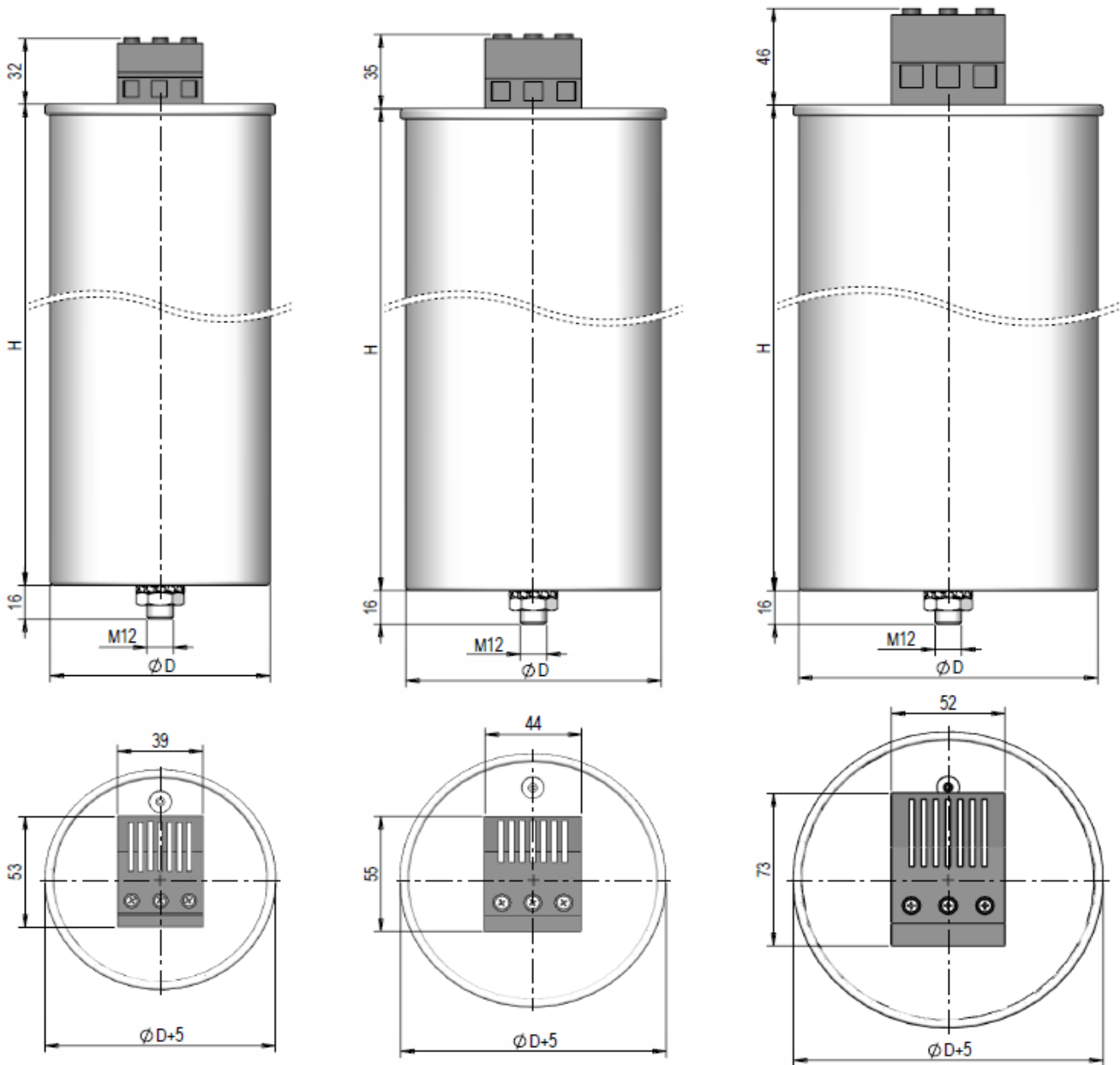
### Temperature category

Temperature category	Ambient temperature		
	Max.	24 h*	1 year*
C	50°C	40°C	30°C
D	55°C	45°C	35°C
D (60°C)	60°C	45°C	35°C

\* Max. mean value during period

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## Drawing



Terminal	A	B	C
Max. cross section (mm <sup>2</sup> )	16	25	35
Max. torque (Nm)	3	3	3,7
Screw head type	Pz	Pz	Hex

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Three phase power capacitors for Power Factor Correction (Delta connection).

### 440 V / 50 Hz

$Q_c$ (kvar)	Type	$C_N (\Delta)$ ( $\mu$ F)	$I_N$ (A)	$\varnothing$ D x H (mm)	m (kg)	Terminal
1	CSADG-0,44/1-HD	3 x 5,5	1,3	85 x 175	0,6	A
1,5	CSADG-0,44/1,5-HD	3 x 8,2	2,0	85 x 175	0,6	A
2	CSADG-0,44/2-HD	3 x 11,0	2,6	85 x 175	0,6	A
2,5	CSADG-0,44/2,5-HD	3 x 13,7	3,3	85 x 175	0,6	A
3,15	CSADG-0,44/3,15-HD	3 x 17,3	4,1	85 x 175	0,7	A
4	CSADG-0,44/4-HD	3 x 21,9	5,3	85 x 175	0,7	A
5	CSADG-0,44/5-HD	3 x 27,4	6,6	85 x 175	0,7	A
6,25	CSADG-0,44/6,25-HD	3 x 34,3	8,2	85 x 175	0,8	A
7,5	CSADG-0,44/7,5-HD	3 x 41,1	9,9	85 x 175	0,9	A
8	CSADG-0,44/8-HD	3 x 43,8	10,5	85 x 175	0,9	A
10	CSADG-0,44/10-HD	3 x 54,8	13,1	85 x 245	1,1	A
12,5	CSADG-0,44/12,5-HD	3 x 68,5	16,4	85 x 245	1,2	A
14	CSADG-0,44/14-HD	3 x 76,7	18,4	85 x 245	1,4	A
15	CSADG-0,44/15-HD	3 x 82,2	19,7	85 x 245	1,4	A
20	CSADG-0,44/20-HD	3 x 110	26,2	100 x 245	1,8	A
25	CSADG-0,44/25-HD	3 x 137	32,8	100 x 245	1,9	A
28,1	CSADG-0,44/28,1-HD	3 x 154	36,8	116 x 245	2,1	B
30	CSADG-0,44/30-HD	3 x 164	39,4	116 x 245	2,2	B
33,3	CSADG-0,44/33,3-HD	3 x 183	43,7	136 x 261	3,8	B
37,5	CSADG-0,44/37,5-HD	3 x 206	49,2	136 x 261	3,9	B
40	CSADG-0,44/40-HD	3 x 219	52,5	136 x 261	4,0	B
50	CSADG-0,44/50-HD	3 x 274	65,6	136 x 355	5,0	C
56,2	CSADG-0,44/56,2-HD	3 x 308	73,8	136 x 355	5,1	C