

Double-Layer Capacitor Modules Based on SuperCap C Cylindrical Cells

Special Features

- Storage capacitor modules with very high capacitance values from 55 F to 200 F and rated voltages of 14 VDC and 28 VDC
- Discharge current up to 2400 A
- Maintenance-free
- Series connected
- Actively balanced
- According to RoHS 2002/95/EC

Construction

Encapsulation: PU plastic case

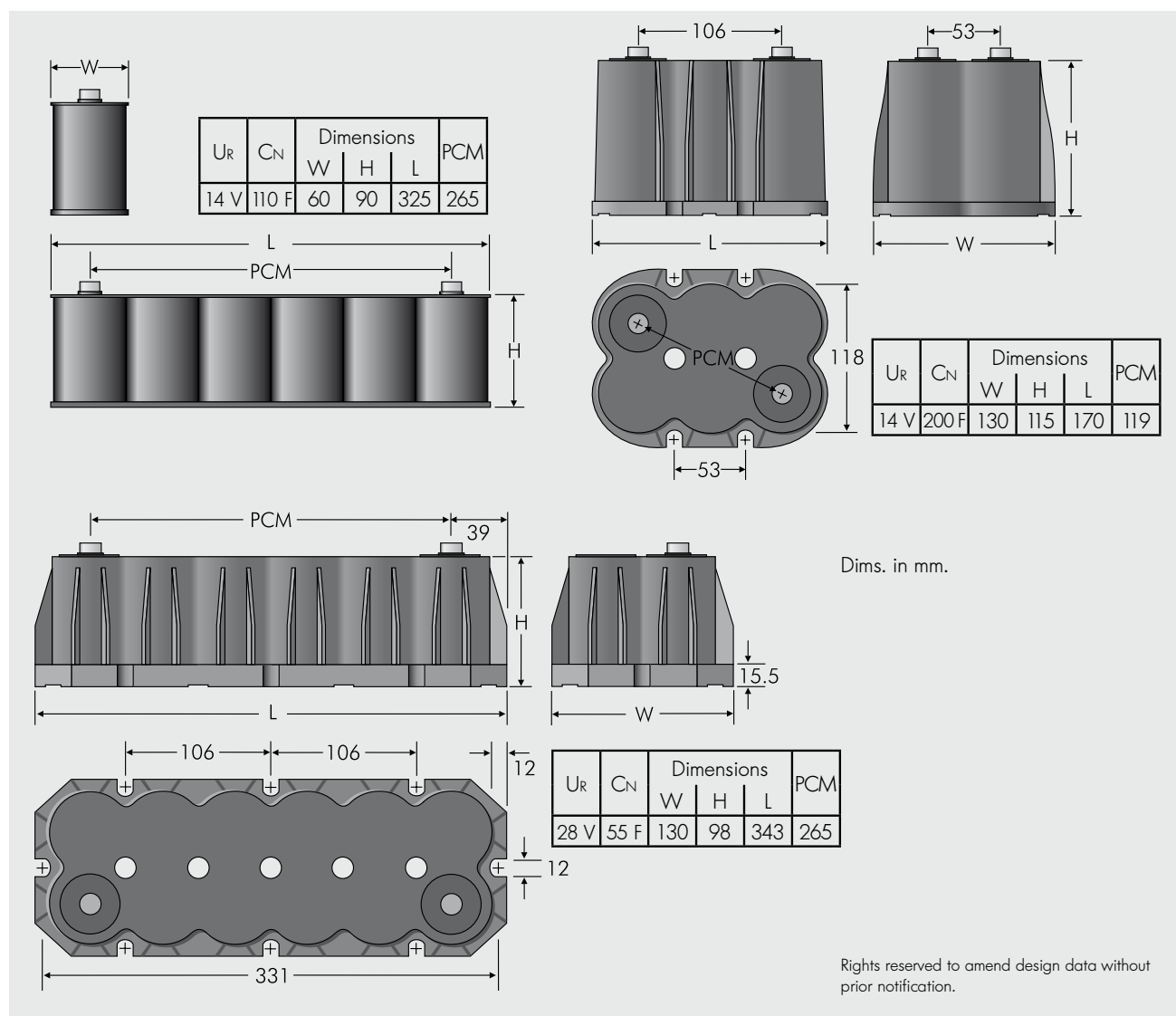
Terminations: Screw terminal M8 x 12

Marking: Colour: Black. Marking: Gold

General Data

U _R	C _N	Dimensions			PCM	Part number	Typical applications
		W	H	L			
14 V	110 F	60	90	325	265	SCMCA3B110MP00MV00	- Automotive - Railway technology - Wind power systems - Uninterruptible power systems (UPS) - Industry
	200 F	130	115	170	119	SCMCA3B200MP00MV00	
28 V	55 F	130	98	343	265	SCMCA4A550MP00MV00	

SuperCap modules of the „Multipurpose“ range are standard devices which can be used for support, protection or replacement of conventional batteries in a large number of applications.





Continuation

Technical Data

Capacitance:	C _N	110 F	200 F	55 F
Capacitance tolerance:	–	±20%	±20%	±20%
Rated voltage:	U _R	14 V	14 V	28 V
Rated current:	I _C	400 A	650 A	400 A
Pulse current:	I _P	up to 1400 A	up to 2400 A	up to 1400 A
Internal resistance:	R _{DC}	7 mΩ	3 mΩ	14 mΩ
Max. stored energy: ±20%	E _{max.}	11 kJ	20 kJ	22 kJ
Operating temperature:	T _{op}	–30° C ... +65° C	–30° C ... +65° C	–30° C ... +65° C
Storage temperature:	T _{st}	–40° C ... +70° C	–40° C ... +70° C	–40° C ... +70° C
Weight:	m	1700 g	2200 g	3400 g
Volume:	V	1.5 l	2.2 l	3 l

Additional Data

Case:	–	PU	PU	PU
Screw terminals:	–	M8 x 12	M8 x 12	M8 x 12
Tightening torque:	–	10 Nm	10 Nm	10 Nm

Comparative Data

Lifetime:				
in hours ¹⁾	h	90 000	90 000	90 000
in cycles ²⁾	Cycles	500 000	500 000	500 000
Energy density:				
gravimetric	E _d	1.5 Wh/kg	2.5 Wh/kg	1.5 Wh/kg
volumetric	E _v	1.85 Wh/l	2.5 Wh/l	1.85 Wh/l

¹⁾ Requirements:

$|\Delta C/C_N| \leq 30\%$, $ESR \leq 2$ times specified limit, $I_{leak} \leq 2$ times of initial value.

²⁾ Test conditions:

$|\Delta C/C_N| \leq 30\%$, $ESR \leq 2$ times specified limit, $I_{leak} \leq 2$ times of initial value

(cycles: charging to U_R, 30 sec rest, discharging to U_R/2, 30 sec rest).



WIMA Customized SuperCap Modules



?

This could be
your SuperCap
module.

WIMA SuperCap MC

WIMA SuperCap MR

Size
Capacitance
Voltage
Casing
Balancing