SIEMENS

Data sheet 4RB2007-1DJ50



Power capacitor PHICAP MKP 380V 0.7 kVAr

Model	
type of certification	CE
standard	IEC 60831-1 / -2
General technical data	
capacitor voltage (rms value) rated value	380 V
capacitor voltage (rms value) maximum	VN +10% (up to 8 h daily), VN +15% (up to 30 min daily), VN +20% (up to 5 min daily), VN +30% (up to 1 min daily)
operating frequency 1 rated value	50 Hz
operating frequency 2 rated value	60 Hz
capacity rated value	15 µF
relative negative tolerance of the capacity rated value	5 %
relative positive tolerance of the capacity rated value	10 %
reactive power of the capacitor at 50 Hz rated value	0.7 kvar
reactive power of the capacitor at 60 Hz rated value	0.8 kvar
clearance minimum	10.4 mm
creepage distance minimum	15.4 mm
type of dielectric	Self-healing metallized polypropylene film
filler	filled with Non PCB, Soft biodegradable resin
safety features of the integrated discharge resistors	Discharge time ≤ 180 s to 75 V or less for safe discharging
voltage test between the terminals	2.15 x VN at 50Hz / 2 s
voltage test between the terminals and housing	3000 V AC / 50Hz, 10s
Protection class	
protection class IP of the terminal	IP00
Dissipation	
capacitor losses [W] in dielectric per kvar	0.2 W
capacitor losses [W] per kvar total	0.45 W
Current	
inrush current peak of the capacitor	200 x In
Short-circuit current maximum	10 kA
capacitor current at 50 Hz rated value	3.1 A
capacitor current at 60 Hz rated value	3.7 A
Product details	
type of cooling	natural or forced air cooling
type of enclosure material	Extruded round aliuminum can with stud
type of mechanical safety	Overpressure disconnector (3-phase)
product component external discharge resistor	Yes
Connections	
type of connecting terminal	PhiCap_Fast-On_1Ph
tightening torque of the screw for securing the equipment maximum	10 N·m

Subject to change without notice
© Copyright Siemens

Mechanical Design	
length	
● of the capacitor	68 mm
● of the capacitor with connections maximum	83 mm
total length of the capacitor with mounting and connections maximum	99 mm
fastening method	Threaded bolt M12
diameter of the capacitor	63.5 mm
diameter of the capacitor maximum	64.5 mm
mounting position	Upright
net weight	0.3 kg
Environmental conditions	
installation altitude maximum	4 000 m
MTBF at temperature class -40/C maximum	135 h
MTBF at temperature class -40/D maximum	100 h
relative humidity without condensation maximum	95 %
temperature classes of the capacitors	Class -40/D: Max. short time: +55 °C, max. mean 24h: +45 °C; max mean 1 year: +35 °C; lowest temperature: -40 °C
ambient temperature during operation	
● minimum	-40 °C
● maximum	55 °C
ambient temperature during storage	
● minimum	-40 °C
● maximum	85 °C

General Product Approval	Declaration of Conformity	other	
Confirmation	EG-Konf.	Confirmation	Miscellaneous

Further information

Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=4RB2007-1DJ50
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/4RB2007-1DJ50
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=4RB2007-1DJ50
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications

last modified: 5/26/2023

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens