

# Power faction correction (HZK-T)

Power capaction(polypropylene film capacitor)  
Standard IEC60831-1/2,UL810



Faetures		
Output Kvar	5Kvar...50Kvar	0.5Kvar...5Kvar
Rated frequency	50Hz	50Hz
Rated voltage	250Vac...525Vac	230Vac...525Vac
Capacitance tolerance	-5%/+10% other on request	-5%/+10% other on request
Electrical test VTT	2.5×VR during 2s	2.5×VR during 2s
Insulation VTC	3000VAC/50Hz during 10s	3000VAC/50Hz during 10s
*tanδ(50)	≤1.0×10 <sup>3</sup>	≤1.0×10 <sup>3</sup>
Protection degree	IP20	IP00(IP50 on request)
Max.permissible voltage Vmax	VR+10%(up to 8h daily)/VR+15%(up to 30min daily)/VR+20%(up to 5min daily)/VR+30% (up to 1min daily)	
Max.permissible current Vmax	UP to 1.3·IR(A)(1.5·IR including combined effects of harmonics, overvoltages and capacitance tolerance)	
Surge current Is	UP to 200·IR(A)	
Power dissipation*	≤0.2 W/kvar(dielectric) and ≤ 0.45 W/kvar(total)	
Temperature	-40/D,Max.55°C	
Humidity	Av.rel.<95%	
Maximum altitude	4000m	
Mean life expectancy	Up to 100 000 hours at temperature class -40/D	
Switching	Max.5000 switching's per year acc.to IEC 60831	
Safety		
Mechanical safety	Overpressure disconnecter	
Max.short circuit current	AFC:10kA according UL 810 standard	
Discharge resistor	≤60s to 75V or less	

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Standard IEC60831-1/2,UL810

Construction		
Material	Aluminium can and top	Aluminium can and top
Dimensions	Φ:76···116mm H:180···350mm	Φ:50,63.5mm H:148mm
Internal connection	Delta Connection	Delta Connection
Terminals	SIGUT terminal,Max.Torque:2Nm creepage distance:≥12.7mm clearance:≥9.6mm (UL810) Max.cable cross section:25mm <sup>2</sup> Max.current:50A	#250 fast-on terminal 6.3×0.8 creepage distance:≥12.7mm clearance:≥9.6mm (UL810) Max.current:15A
Impregnation	Non PCB,resin filling:soft polyurethane resin	
Fixing	Threaded bolt M12	
Max Torque(Al can stud)	10Nm	

Approval	Third part test approval Internal test approval	
Standard terminals		<p>2+2+2 type</p>
Discharge resistor	<p>Resistors are soldered inside of the terminal block with terminals</p>	
Standard Monting	<p>M12 H16 M16 H25 Max. Torque:10Nm Star washer:J12.5 DIN6797 Stud:BM12 DIN439</p>	<p>M8.0 H14 M10 H16</p>


**Three-phase HZK-T;**

Type	50Hz		C <sub>R</sub> μF	D × H mm
	Q <sub>R</sub> Kvar	I <sub>R</sub> A		
<b>Rated Voltage 250VAC, 50Hz</b>				
HZK250-T-5.0-3	5.0	11.5	255	76×200
HZK250-T-7.5-3	7.5	17.3	381	76×240
HZK250-T-10.0-3	10.0	23.1	510	86×240
HZK250-T-12.0-3	12.0	27.7	612	96×240
HZK250-T-15.0-3	15.0	34.6	765	96×240
HZK250-T-20.0-3	20.0	46.2	1020	106×290
HZK250-T-25.0-3	25.0	57.7	1272	116×290
<b>Rated Voltage 400VAC, 50Hz</b>				
HZK400-T-5.0-3	5.0	7.2	99	76×170
HZK400-T-7.5-3	7.5	10.8	150	76×200
HZK400-T-10.0-3	10.0	14.4	198	76×275
HZK400-T-12.5-3	12.5	18	249	86×275
HZK400-T-15.0-3	15.0	21.6	300	96×275
HZK400-T-20.0-3	20.0	28.9	399	116×275
HZK400-T-25.0-3	25.0	36.1	498	126×275
HZK400-T-30.0-3	30.0	43.3	597	126×350
HZK400-T-40.0-3	40.0	57.8	798	136×350
HZK400-T-50.0-3	50.0	72.2	996	136×350
<b>Rated Voltage 415VAC, 50Hz</b>				
HZK415-T-5.0-3	5.0	7.0	93	76×170
HZK415-T-7.5-3	7.5	10.4	138	76×200
HZK415-T-10.0-3	10.0	13.9	186	76×240
HZK415-T-12.5-3	12.5	17.4	231	86×240
HZK415-T-15.0-3	15.0	20.9	279	96×275
HZK415-T-20.0-3	20.0	27.8	369	116×275
HZK415-T-25.0-3	25.0	34.8	462	126×275
HZK415-T-30.0-3	30.0	41.7	555	116×350
HZK415-T-40.0-3	40.0	55.6	738	136×350
HZK415-T-50.0-3	50.0	69.6	924	136×350
<b>Rated Voltage 440VAC, 50Hz</b>				
HZK440-T-5.0-3	5.0	6.6	81	76×140
HZK440-T-7.5-3	7.5	9.8	123	76×200
HZK440-T-10.0-3	10.0	13.1	165	76×240
HZK440-T-12.5-3	12.5	16.4	207	86×240
HZK440-T-15.0-3	15.0	19.7	246	96×275
HZK440-T-20.0-3	20.0	26.2	330	106×275
<b>HZK440-T-25.0-3</b>	<b>25.0</b>	<b>32.8</b>	<b>411</b>	<b>116 × 275</b>

**Three-phase HZK-T; (2+2+2)fast-on terminal**

Type	50Hz		C <sub>R</sub> μF	D × H mm
	Q <sub>R</sub> Kvar	L <sub>R</sub> A		
<b>Rated Voltage 440VAC, 50Hz</b>				
HZK440-T-30.0-3	30.0	39.4	495	116×350
HZK440-T-40.0-3	40.0	52.4	660	126×350
HZK440-T-50.0-3	50.0	65.6	822	136×350
<b>Rated Voltage 450VAC, 50Hz</b>				
HZK450-T-5.0-3	5.0	6.4	78	76×180
HZK450-T-7.5-3	7.5	9.6	117	76×240
HZK450-T-10.0-3	10.0	12.8	156	76×240
HZK450-T-12.5-3	12.5	16	198	86×240
HZK450-T-15.0-3	15.0	19.2	237	86×275
HZK450-T-20.0-3	20.0	25.6	315	106×275
HZK450-T-25.0-3	25.0	32.1	393	116×275
HZK450-T-30.0-3	30.0	38.5	471	126×275
HZK450-T-40.0-3	40.0	51.2	630	126×350
HZK450-T-50.0-3	50.0	64.2	786	136×350
<b>Rated Voltage 480VAC, 50Hz</b>				
HZK480-T-5.0-3	5.0	6.0	69	76×140
HZK480-T-7.5-3	7.5	9.0	105	76×170
HZK480-T-10.0-3	10.0	12.0	138	76×200
HZK480-T-12.5-3	12.5	15	174	76×275
HZK480-T-15.0-3	15.0	18.0	207	86×275
HZK480-T-20.0-3	20.0	24.0	276	96×275
HZK480-T-25.0-3	25.0	30.1	345	106×275
HZK480-T-30.0-3	30.0	36.0	414	116×275
HZK480-T-40.0-3	40.0	48.0	552	116×350
HZK480-T-50.0-3	50.0	60.2	690	126×350
<b>Rated Voltage 525VAC, 50Hz</b>				
HZK525-T-5.0-3	5.0	5.5	57	76×140
HZK525-T-7.5-3	7.5	8.2	87	76×170
HZK525-T-10.0-3	10.0	11.0	117	76×200
HZK525-T-12.5-3	12.5	13.7	144	86×240
HZK525-T-15.0-3	15.0	16.5	174	86×275
HZK525-T-20.0-3	20.0	22.0	231	96×275
HZK525-T-25.0-3	25.0	27.5	288	106×275
HZK525-T-30.0-3	30.0	33.0	345	106×275
HZK525-T-40.0-3	40.0	44.0	462	106×350
HZK525-T-50.0-3	50.0	55.0	576	116×350

Type	50Hz		C <sub>R</sub> μF	D × H mm
	Q <sub>R</sub> Kvar	L <sub>R</sub> A		
<b>Rated Voltage 230VAC, 50Hz, Delta connection</b>				
HZK230-T-0.5-3	0.5	1.3	3·10	50×140
HZK230-T-0.7-3	0.7	1.8	3·14	50×140
HZK230-T-1.0-3	1.0	2.5	3·20	50×140
HZK230-T-1.5-3	1.5	3.8	3·30	63.5×140
HZK230-T-2.0	2.0	5.0	3·40	63.5×140
HZK230-T-2.5-3	2.5	6.3	3·50	63.5×140
<b>Rated Voltage 400VAC, 50Hz, Delta connection</b>				
HZK400-T-1.0-3	1.0	1.4	3·6.6	50×140
HZK400-T-1.5-3	1.5	2.2	3·10	50×140
HZK400-T-2.0-3	2.0	2.9	3·13	50×140
HZK400-T-2.5-3	2.5	3.6	3·17	50×140
HZK400-T-5.0-3	5.0	7.2	3·33	63.5×140
<b>Rated Voltage 415VAC, 50Hz, Delta connection</b>				
HZK415-T-1.0-3	1.0	1.4	3·6.2	50×140
HZK415-T-1.5-3	1.5	2.1	3·9.2	50×140
HZK415-T-2.0-3	2.0	2.8	3·12	50×140
HZK415-T-2.5-3	2.5	3.5	3·15	63.5×140
HZK415-T-5.0-3	5.0	7.0	3·31	63.5×140
<b>Rated Voltage 440VAC, 50Hz, Delta connection</b>				
HZK440-T-0.9-3	0.9	1.2	3·5.2	50×140
HZK440-T-1.0-3	1.0	1.3	3·5.5	50×140
HZK440-T-1.2-3	1.2	1.6	3·6.6	50×140
HZK440-T-1.5-3	1.5	2.0	3·8.8	50×140
HZK440-T-2.0-3	2.0	2.6	3·11	50×140
HZK440-T-2.1-3	2.1	2.8	3·12	50×140
HZK440-T-2.5-3	2.5	3.3	3·14	63.5×140
HZK440-T-4.2-3	4.2	5.5	3·23	63.5×140
HZK440-T-5.0-3	5.0	6.6	3·27	63.5×140
<b>Rated Voltage 480VAC, 50Hz, Delta connection</b>				
HZK480-T-1.5-3	1.5	1.8	3·6.9	50×140
HZK480-T-2.0-3	2.0	2.4	3·9.2	50×140
HZK480-T-2.5-3	2.5	3.0	3·12	63.5×140
<b>Rated Voltage 525VAC, 50Hz, Delta connection</b>				
HZK525-T-1.0-3	1.0	1.1	3·3.9	50×140
HZK525-T-1.5-3	1.5	1.6	3·5.8	50×140
HZK525-T-2.0-3	2.0	2.2	3·7.7	63.5×140
HZK525-T-2.5-3	2.5	2.7	3·9.6	63.5×140