



1. H.V. DIN-Bushings
2. H.V. neutral Plug-in bushing
3. L.V. DIN-Bushings
4. Reactor's tap changer
5. Earthing terminal
6. Oil drain valve
7. Lifting lugs
8. Filling tube
9. Diagram plate
10. Rated plate
11. Neutral to earthing terminal
12. Oil level indicator

A	B	C	k		n		Mass(kg)	
			H.V.	L.V.	H.V.	L.V.	Oil	Total
1510	1110	1310	275	120	385	178	580	2320

SHR-T 8/200-20,5



Three-phase oil-immersed hermetically sealed transformer
and shunt reactor with Petersen coil capability
200kVA+178kVAr, 20,5/0.41kV+20,5kV, Dyn11+YN

TECHNICAL DATA

1.	Manufacturer		KKM Power d.o.o, Serbia				
2.	Product type		Oil-immersed, hermetically sealed				
3.	Product kind		Distribution transformer and shunt reactor with Petersen coil capability within the same tank				
4.	Standard		IEC 60076 group of standards				
5.	Product name		SHR-T 8/200-20,5				
Transformer data							
6.	Rated power	[kVA]	200				
7.	Number of phases		3				
8.	Rated frequency	[Hz]	50				
9.	Highest voltage of equipment	[kV]	24				
10.	Insulation level	[kV]	LI 125 AC 50/ LI 0 AC 10				
11.	Rated primary voltage	[kV]	20.5				
12.	Rated secondary voltage	[kV]	0.41				
13.	Connection symbol		Dyn11				
14.	Short circuit impedance	[%]	4				
Shunt reactor data							
15.	Type of shunt reactor		A bank of three single-phase reactors coupled in YN vector group				
16.	Number of phases		3				
17.	Rated frequency	[Hz]	50				
18.	Highest voltage of equipment	[kV]	24				
19.	Insulation level	[kV]	LI 125 AC 50				
20.	Rated voltage	[kV]	$20.5/\sqrt{3}$				
21.	Maximum operating voltage	[kV]	20.5				
22.	Tap changer position		1	2	3	4	5
23.	Rated power	[kVAr]	59	89	118	148	178
24.	Rated current	[A]	1.67	2.5	3.33	4.15	5
25.	Rated fault current	[A]	5	7.5	10	12.5	15
26.	Rated reactance	[Ω /phase]	7088	4735	3555	2852	2367
27.	Zero-sequence reactance	[Ω /phase]	7088	4735	3555	2852	2367



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28.	Rated fault duration	[h]	2
29.	R/X ratio at 75°C	[%]	<1.25
Temperature rises, conditions of use and installation			
30.	Total losses at 75°C (at rated transformer load and tap position 5 of reactor-15A fault current)	[W]	5850
31.	Type of cooling		ONAN
32.	Installation altitude	[m]	<1000
33.	Maximum temperature of ambient	[°C]	40
34.	Maximum temperature rise of winding	[K]	65
35.	Maximum temperature rise of oil	[K]	60
36.	Thermal class of insulation		A
37.	Installation conditions		Outdoor/Indoor
Approximate dimensions and masses			
38.	Approximate length of product	[mm]	1510
39.	Approximate width of product	[mm]	1110
40.	Approximate height of product	[mm]	1310
41.	Mass of oil in product	[kg]	580
42.	Total mass of product	[kg]	2320
Accessories			
43.	HV porcelain bushing		DIN 42531 (24kV, 250A)
44.	HV plug-in neutral bushing		EN 50180 (24kV, 250A)
45.	LV porcelain bushing		DIN 42530 (1kV, 630A)
46.	Reactor tap changer		Standard
47.	Oil drain valve		Standard
48.	Oil level indicator		Standard, vertical, for hermetically sealed tanks