



kVAr	A	B	C	d	e	g	l	m	k		n		Mass(kg)	
									H.V.	L.V.	H.V.	L.V.	Oil	Total
60-178	975	910	1410	-	-	-	-	-	275	-	-	-	440	1550



**Three-phase oil-immersed
hermetically sealed shunt reactor
60-178 kVAr, 20.5kV, YN**

Offer No. **P19-124**
Drawing No. **MS-1926**
Version **1.0**
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TECHNICAL DATA

1.	Manufacturer		KKM Power d.o.o, Serbia				
2.	Reactor type		Oil-immersed, hermetically sealed.				
3.	Reactor kind		Shunt reactor with Petersen coil functionality.				
4.	Standard		IEC 60076-6 (Clause 7)				
5.	Reactor name		SHR 8-20,5				
6.	SNRO		57 090 00				
7.	Number of phases		3				
8.	Rated frequency	[Hz]	50				
9.	Highest voltage of equipement	[kV]	24				
10.	Insulation level	[kV]	LI 125/AC 50				
11.	Rated voltage	[kV]	20.5				
12.	Maximum operating voltage	[kV]	21				
13.	Winding connection		YN				
Tap position			1	2	3	4	5
14.	Rated power	[kVAr]	60	89	119	148	178
15.	Rated current	[A]	1.67	2.5	3.33	4.17	5
16.	Zero-sequence impedance	[Ω /phase]	7101	4735	3550	2840	2367
17.	Rated fault current in neutral	[A]	5	7.5	10	12.5	15
18.	Fault duration	[min]	120				
19.	Tap changer	Yes/No	Yes, with five taps				
20.	R/X ratio at 75°C	[%]	<1.5 (for each tap)				
21.	Non-linearity of reactance, up to 22.55kV	[%]	<5				
22.	Sound power level	[dB(A)]	<60				
23.	Type of cooling		ONAN				
24.	Instalation altitude	[m]	<1000				



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25.	Minimum / Maximum temperature of ambient	[°C]	-40/40
26.	Maximum temperature rise of oil: in normal/after 120 min earth fault use	[K]	<40/<60
27.	Thermal class of insulation		A
28.	Installation conditions		Indoor/Outdoor
29.	Approximate length of reactor	[mm]	975
30.	Approximate width of reactor	[mm]	910
31.	Approximate height of reactor	[mm]	1410
32.	Mass of oil in reactor	[kg]	440
33.	Total mass of reactor	[kg]	1550
34.	Accessories		<ol style="list-style-type: none">Terminals Phase: EN 50180 Porcelain, 24kV, 250A Neutral: EN 50180 Plug-in, 24kV, 250ATap changer Standard, offloadOil level indicator Standard, vertical, for hermetically sealed tankOil drain valve Standard

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Made by: D.Kovinić