

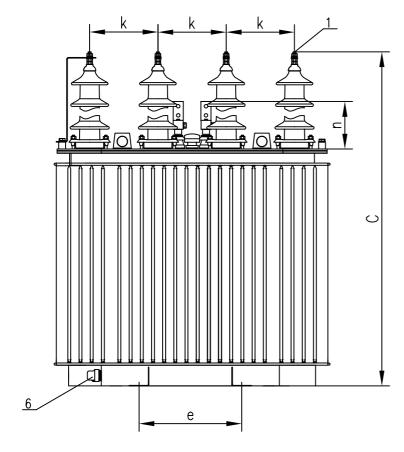
Three-phase oil-immersed hermetically sealed distribution transformer with Petersen coil 200kVA, 20.5/0.41kV, ZNznO, 5-15A, 5min

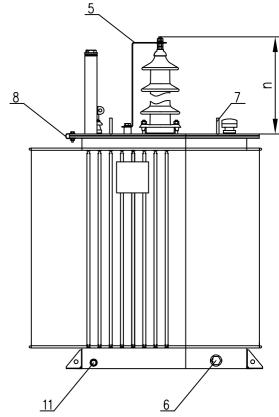
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 P21-051

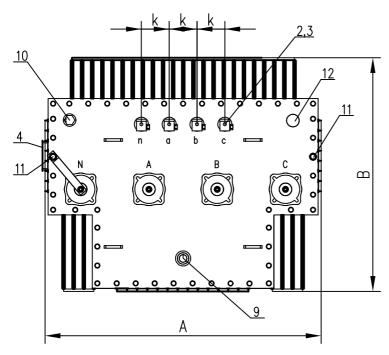
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- 1. H.V. Bushings EN 50180 24kV, 250A
- 2. L.V. Bushings EN 50386 1kV, 250A
- 3. Flag with two holes DIN 43675
- 4. Movable rating plate
- 5. Neutral to earthing terminal
- 6. Oil drain valve
- 7. Lifting lugs
- 8. Electrical connection tank-cover
- 9. Petersen coil tap changer
- 10. Filling tube
- 11. Earthing terminal
- 12. Oil level indicator

kVA	A	В	C	е		k	r	1	Oil volume	Total mass				
1	, ,)	H.V.	L.V.	H.V.	L.V.	(1)	(kg)	CNT	200-	20,5-	-E
200	1500	1090	1800	520	270	120	385	245	750	2900				

DIMENSIONAL DRAWING

Note: Drawing is not to scale.



Three-phase oil-immersed hermetically sealed distribution transformer with Petersen coil 200kVA, 20.5/0.41kV, ZNzn0, 5-15A, 5min

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TECHNICAL DATA FOR OFFER

1.	Manufacturer	KKM Power d.o.o, Serbia							
2.	Transformer type	Oil-immersed, hermetically sealed							
3.	Product kind	Distribution transformer and Petersen coil within the same tank							
4.	Standard	In accordance with all standards stated in ELENIA tender technical specification Version A 19.04.2021.							
5.	Product name		CNT 200-20,5-E						
TRANSFORMER DATA									
6.	Rated power	[kVA]	200						
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 / LI 0 AC 3						
11.	Rated primary voltage	[kV]	20.5						
12.	Regulation on primary side	Yes/No	No						
13.	Rated secondary voltage	[kV]	0.41						
14.	Connection group		ZNzn0						
15.	No-load losses	[W]	250						
16.	Load losses at 75°C	[W]	2750						
17.	Impedance voltage at 75°C	[%]	4						
18.	Sound power level	[dB(A)]	46						
		[%]	Load=0.25		Load=0.5				
			cosφ= 0.8 ind	соѕф= 1	cosφ= 0.8 ind	соѕф= 1			
			0.84	0.35	1.69	0.71			
19.	Voltage drop and efficiency		98.9563	99.1633	98.8417	99.0712			
19.	voltage drop and efficiency		Load=0.75		Load=1.0				
			cosφ= 0.8 ind	cosφ= 1	cosφ= 0.8 ind	cosφ= 1			
			2.53	1.07	3.38	1.45			
			98.5247	98.8163	98.1595	98.5222			



Three-phase oil-immersed hermetically sealed distribution transformer with Petersen coil 200kVA, 20.5/0.41kV, ZNzn0, 5-15A, 5min

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		PETERSEN (COIL DATA	4			
20.	Rated voltage	;	[kV]	20.5/√3			
				5			
	Rated current			7.5			
21.		duration: ≤5min)	[A]	10			
		_ ,	-	12.5			
				15			
	C	OMBINED DATA OF TRANSFO	ORMER AN	ND PETERSEN COIL			
	Tap position	Rated short-time neutral current [A]	Rated compound zero-sequence impedance $[\Omega]$				
	1	5	2367				
22.	2	7.5	1578				
22.	3	10	1184				
	4	12.5	947				
	5	15		789			
23.	Rated short-ti	me neutral current duration	[min]	≤5			
24.	R ₀ /X ₀ ratio at	75°C for each tap	[%]	< 2.5			
25.	Non-linearity	up to $1.1 \text{xU}_r \text{ (U}_r = 20.5 / \sqrt{3} \text{kV)}$	[%]	< 2.0			
26.	Type of cooling	ng		ONAN			
27.	Installation al	titude	[m]	<1000			
28.	Installation co	onditions		Indoor / Outdoor			
29.	Winding mate	erial	Cu / Al	Al			
30.	Thermal class	of insulation		A			
31.		ninimum temperature of ambient	[°C]	40 / -40			
		old start energizing temperature mperature rise of winding		-30			
32.		nominal operation	[K]	65			
	after 51	min fault usage		80			
22		mperature rise of oil	[17]	60			
33.	_	nominal operation min fault usage	[K]	60 75			
	- arter 31	mm raut asage		Hot dip galvanizing			
34.	Surface treatn	nent		or painting according to			
				EN ISO 12944-2 class C3 or C4			



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23.	Maximum length of product	[mm]	1500			
24.	Maximum width of product	[mm]	1090			
25.	Maximum height of product	[mm]	1800			
26.	Maximum oil volume in product (T=20°C, p=1atm)	[1]	750			
27.	Maximum total mass of product	[kg]	2900			
	ACCESS	SORIES				
28.	HV terminals	Porcelain bushings (EN 50180: 24kV, 250A)				
29.	LV terminals	Porcelain bushings (EN 50386: 1kV, 630A) + flags with two holes (DIN 43675)				
30.	Reactor tap changer	Standard, off load				
31.	Oil level indicator	Standard, for hermetically sealed tank				
32.	Oil drain valve	Standard				