

# VAMP 135

OVER-, UNDER-, RESIDUAL VOLTAGE AND  
FREQUENCY LOAD SHEDDING RELAY



- Easy to use: flexible output and blocking matrix
- Event handling and fault registration
- Programmable mA output
- Disturbance recorder
- Non-volatile memory
- Local and remote communication
- Various communication protocols including SPA, Profibus, Modbus, Modbus TCP, IEC 60 870-5-103, TCP/IP



## Main technical data/ VAMP 135

Auxiliary voltage, Uaux	40...265 V ac / dc (optionally 18...36 Vdc)	
Rated phase voltage Un	50 to 240 V	
- Voltage measuring range	0 to 265 V	
Rated residual voltage Uo	25 to 240 V	
- Voltage measuring range	0 to 265 V	
Thermal Withstand	300 V (continuous)	
Rated frequency fn	50 / 60 Hz	
- frequency measuring range	16...75 Hz	
Digital inp	1 pc	
- external operating voltage	18...265 V ac / dc	
<b>Tests and environment</b>		
Emission	EN 55022	
Immunit	IEC 60255-22-1, IEC 60255-11, EN 61000-4-6, EN 61000-4-5, EN6100-4-4, EN 61000-4-3, EN6100-4-2	
Insulation t	IEC 60255-5	
Surge voltage	IEC 60255-5	
Vibration shock	IEC 60255-21-1	
Operating temperature	-10...+55° C	
Relative humidity	<95 %, no condensation allowed	
Degree of protection	IP54, (IEC 60529), flush mounted	
Weight	2,3 kg	
Dimension (w x h x d)	99 x 155 x 225 mm	
<b>Protection stages</b>		
<b>Overvoltage protection</b>		
Overvoltage stage	U>	59
Overvoltage stage	U>>	59
Overvoltage stage	U>>>	59
<b>Undervoltage protection</b>		
Undervoltage stage	U<	27
Undervoltage stage	U<<	27
Undervoltage stage	U<<<	27
<b>Residual overvoltage protection</b>		
Residual voltage stage	Uo>	59N
Residual voltage stage	Uo>>	59N
Frequency protection		
Over/underfrequency stage	f>/f<	81H
Over/underfrequency stage	f>>/f<<	81H
Underfrequency stage	f<	81L
Underfrequency stage	f<<	81L
<b>Other</b>		
Disturbance recorder (DR)	All analogue channels and binary inputs/outputs	
Circuit breaker failure protection	CBFP	50BF
Trip circuit supervision	TCS	
<b>Measurements</b>		
Line voltage	U12, U23, U31	
Phase voltage	U11, UL2, UL3	
Residual voltage	Uo (V), Uo (%)	
Frequency	f	
<b>Transducer</b>	One mA output for any relevant signals	
<b>Communication protocols</b>		
IEC 60 870-5-103		
Transparent TCP/IP		
Modbus TCP		
Modbus RTU		
Profibus DP		
SPA		

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