VAMP 150

MOTOR PROTECTION RELAY

- Easy to use: flexible output and blocking matrix
- Three phase AC-motor protection
- Motor start register
- Event handling and fault registration
- Programmable mAoutput
- 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 150

Auxiliary voltage, Uaux	40…265 V ac / dc (optionally 18…36 Vdc)
Rated phase current In	1A or 5A
- current measuring range	0…50 x In
Rated neutral current Ion	1A or 5A
- current measuring range	0…5 x In
Thermal Withstand	4 x In (continuous), 100 x In (for 1 s)
Rated frequency fn	45…65 Hz
- frequency measuring range	16…75 Hz
Digital input	1 pc
- external operating voltage	18…265 V ac / dc

Tests and environment

Emission	EN 55022
Immunity	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 test	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 (IEC 60529)	IP54, flush mounted
Weight	2,3 kg
Dimension (w x h x d)	99 x 155 x 225 mm

Protection stages

Overcurrent protection

Overcurrent stage	I>	50/51
Overcurrent stage	I>>	50/51
Overcurrent stage	I>>>	50/51
Loss of load / Undercurrent stage	I<	37
Protection unbalance	I_2>	46
Phase sequence	I_2>>	46
Thermal overload stage	T>	49
Frequent starts supervision	N>	66
Stall protection	Ist>	48

Residual current protection

Residual current stage	Io>	50N/51N
Residual current stage	Io>>	50N/51N

Arc protection (option)

Arc protection stage	ArcI>	51L>
Arc protection stage	Arc Io>	51NL>

Other

Disturbance recorder (DR)	All analogue channels and binary inputs/outputs	
Circuit breaker failure protection	CBFP	50BF
Trip circuit supervision	TCS	

Measurements

Phase currents	I_{L1}, I_{L2}, I_{L3}, IL
Residual current	Io (A), Io (%)
Current unbalance	I_2/I_1
Current unbalance	I_2/Imot
Frequency	f
Temperature raise of stator	%
Current diagram	(1
Note: (1 with VAMPSET software	

Transducer	One mA output for any relevant signals

Communication protocols

IEC 60 870-5-103
Transparent TCP/IP
Modbus TCP
Modbus RTU
Profibus DP
SPA

VL150.EN005

Vaasa Electronics Group

VAMP