

Address (hex)	Group	Description	Values range	Step	Unit	Format	Def. value	P125	P126	P127
0070	<b>Protection 27</b>	Information of the threshold status U<				F17				•
0071		Information of the threshold status U<<				F17				•
0072	<b>Protection 32n</b>	Information of the threshold status Pe/ leCos>				F16		•	•	•
0073		Information of the threshold status Pe/ leCos>>				F16		•	•	•
0074		Angle between le^Ue	0-359		Deg	F1				
0075		Angle between le^Ue	0-359		Deg	F1		•	•	•
0076	<b>Protection 59</b>	Information of the threshold status U>				F17				•
0077		Information of the threshold status U>>				F17				•
0078-0079		Reserved								
007A	<b>Protection 59n</b>	Information of the threshold status Ue>>>>				F16		•	•	•
007B	<b>Protection 67n</b>	Information of the threshold status le_d>				F16				•
007C	<b>Protection 46</b>	Information of the threshold status I2>				F17			•	•
007D		Information of the threshold status I2>>				F17			•	•
007E		Information of the threshold status I2>>>				F17			•	•
007F	<b>Boolean equations</b>	Boolean equation status				F48			•	•
0080-0081	<b>Voltage measurement</b>	Phase A RMS voltage		1	10mV	F18A				•
0082-0083		Phase B RMS voltage		1	10mV	F18A				•
0084-0085		Phase C RMS voltage		1	10mV	F18A				•
0086-0087		Earth RMS voltage		1	10mV	F18A		•	•	•
0088		Module UAB				F1				•
0089		Module UBC				F1				•
008A		Module UCA				F1				•
008B		Module Ue				F1		•	•	•
008C		Angle between IA^UAB	0-359		Deg	F1				•
008D		Angle between IA^UBC	0-359		Deg	F1				•
008E		Angle between IA^UCA	0-359		Deg	F1				•
008F		Angle between IA^Ue	0-359		Deg	F1			•	•
0090-0092		Max phase A RMS voltage		1	10mV	F18				•
0092-0093		Max phase B RMS voltage		1	10mV	F18				•
0094-0095		Max phase C RMS voltage		1	10mV	F18				•
0096-0097		Average phase A RMS voltage		1	10mV	F18				•
0098-0099		Average phase B RMS voltage		1	10mV	F18				•
009A-009B		Average phase C RMS voltage		1	10mV	F18				•
009C-009D	<b>Power measures</b>	Module Pe			CAN	F18A		•	•	•
009E-009F		3-Phase Active Power (P)	-999.9 10 <sup>6</sup> to 999.9 10 <sup>6</sup>	1	10Watt	F18				•
00A0-00A1		3-Phase Re-active Power (Q)	-999.9 10 <sup>6</sup> to 999.9 10 <sup>6</sup>	1	10VAR	F18				•
00A2		3-Phase CosPHI	-100 to 100	1	0.01	F2				•
00A3-00A4		Rolling demand average RMS IA value		1	10mA	F18A			•	•
00A5-00A6		Rolling demand average RMS IB value		1	10mA	F18A			•	•
00A7-00A8		Rolling demand average RMS IC value		1	10mA	F18A			•	•
00A9-00AA	<b>Power measures</b>	Module leCos				F18A		•	•	•
00AB-00AC		3-Phase Apparent power (S)	-999.9 10 <sup>6</sup> to 999.9 10 <sup>6</sup>	1	10VA	F18				•
00AD-00AE	<b>Energy measures</b>	Apparent energy 3Ph V A Hours	from 1 to 4.200 x 10 <sup>9</sup>	1	kVAh	F18A				•

Word Nr.	Contents
24	Acknowledgement: 0 = fault not acknowledged 1 = fault acknowledged

(1) Fault value is a **CAN value**; it has to be processed according to the below formulas to find corresponding primary value.

**Phase current values calculation formula**

Line phase current value (primary value) = value x phase primary CT ratio / 800

Earth current values calculation formula

The formula depends of nominal earth current:

*0.1 to 40 len range*

Line earth current value (primary value) = value x earth primary CT ratio / 800

*0.01 to 8 len range*

Line earth current value (primary value) = value x earth primary CT ratio / 3277

*0.002 to 1 len range*

Line earth current value (primary value) = value x earth primary CT ratio / 32700

**Phase voltage values calculation formula**

The formula depends of nominal phase voltage:

*57 to 130 V range*

Line phase voltage value (primary value) = value x (phase primary VT ratio / phase secondary VT ratio) / 63

*220 to 480 V range*

Line phase voltage value (primary value) = value / 17

**Earth voltage values calculation formula**

The formula depends of nominal earth voltage:

*57 to 130 V range*

Line earth voltage value (primary value) = value x (earth primary VT ratio / earth secondary VT ratio) / 63

*220 to 480 V range*

Line earth voltage value (primary value) = value / 17

**Phase power values calculation formula**

The formula depends of nominal phase voltage:

*57 to 130 V range*

Line phase power value (primary value) = value x (phase primary CT ratio x (phase primary VT ratio / phase secondary VT ratio)) / (800 x 63)

*220 to 480 V range*

Line phase power value (primary value) = value x phase primary CT ratio / (800 x 17)