PRODUCT SELECTION MATRIX - AUTOMATIC POWER FACTOR CONTROLLER

TAS PowerTek

	Features/Models √ - Available X - Not Available • - Optional	3-CT PFC																		1-CT PFC																	
		SPF-21Y/FK6DCTO	SPF-21Y/FT6DCTO	SPF-21Y/FK3DCTO	SPF-21Y/FT3DCTO	SPF-21Y/AK3DCTO	SPF-21Y/AT3DCTO	SPF-21Y/FK3NNNO	SPF-21Y/FT3NNNO	SPF-21Y/AK3NNNO	SPF-21Y/AT3NNNO	SPF-21Y/FK3NMNO	SPF-21Y/AK3NMNO	SPF-21Y/FK1NMNO	SPF-21Y/AK1NMNO	SPF-21Y/FK1NNNO	SPF-21Y/AK1NNNO	APF-09Y/4K1	APF-09Y/4T1	APF-09Y/6K1	APF-09Y/6T1	APF-09Y/8K1	APF-09Y/8T1	APF-09Y/AK1	APF-09Y/AT1	APF-09Y/CK1	APF-09Y/CT1	SPF-21X/8K1MO	SPF-21X/8T1MO	SPF-21X/4K1NO	SPF-21X/6K1NO	SPF-21X/8K1NO	SPF-21X/8T1NO
PFC HARDWARE FEATURES	Steps as model declared	16	16	16	16	11	11	16	16	11	11	16	11	16	11	16	11	4	4	6	6	8	8	11	11	12	12	8	8	4	6	8	8
	Mounting dimensions 144 X 144	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X
	Mounting dimensions 96 X 96	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Step switching Relay (R)	√	X	√	X	√	X	√	X	√	X	√	√	√	√	√	√	√	X	√	X	√	X	√	X	√	X	√	X	√	√	√	√
	Step switching Transistor (T)	X	√	X	√	X	√	X	√	X	√	X	X	X	X	X	X	X	√	X	√	X	√	X	√	X	√	X	√	X	X	X	X
	Supply Current Measurement 3-CTs	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Supply Current Measurement 1-CT	X	X	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Capacitor/Inductor Current Meas. 3-CTs or 1-CT	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Data Logging	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Communication port RS-485 MODBUS + PC-App	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	Communication port RS-232 GPRS MODEM + PC-App	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	External Temp. sense PT100	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Internal Temperature sensing within MCU	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Auxiliary Dig. Inputs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Auxiliary Digital Outputs	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
MEASUREMENT & DISPLAY	Supply freq. phase locked measurement	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Voltage meas. 4W, 3W, 2WLL, 2WLN	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Power meas. 3Watt-met, 2Watt-met, 1Watt-met	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Supply RMS Current measurement	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Supply RMS Voltage measurement	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	VAR injection RMS Current measurement	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Cap/inductor Neutral / EF current	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Volt/Amp/Cap-ind. Volt & Amp fundamental values	√	√	•	•	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X	X	X	X	X	X	X	X	•	•	•	•	•	•
	Power Distortion & Cross distortion values	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Minimum supply current sensitivity 0.001% of rated	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Frequency range 45Hz to 65Hz	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	P,Q,S RMS 3-phase overall Values	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	P,Q,S Fundamental 3-phase Overall Values	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Ph,Qh,Sh + & - RMS Energy	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Ph1,Qh1,Sh1 + & - Fund. Energy	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Maximum (+/-) values of various measured parameters	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Maximum Demand KVA & KW-user set sliding window	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Supply Voltage harmonics THD-% & value	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
	Supply current harmonics THD% & TDD%	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
	Cap/inductor Current harmonics THD-% & values	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Volt & Amp, C/I.Amp harmonic spectrum up to 31st	√	√	•	•	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X	X	X	X	X	X	X	X	•	•	•	•	•	•
	Display on External PC/Laptop	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	AC voltage meas. with aux.i/p (contactor coil)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	PFC internal operating temperature	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	External temperature measurement by PT100 RTD	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Capacitor steps VAR on-line detection (normalized)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Capacitor steps Utilization (switching & time)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	PFC powering up/down counter	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
RELIABILITY FEATURES	PFC power voltage 90V~ to 485V~ (Max limit 600V~)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	EMI filter for transient protection on PFC power supply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Early Warning Power Fail detection for data loss	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Real Time Clock with Super-Cap backup (no maint)	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Capability to work in Dusty & Conductive environment	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Operatibiliy at -10°C to +60°C ambiant temperature	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	S/c protected sourcing / sinking current Transistor o/ps	X	√	X	√	X	√	X	√	X	√	X	X	X	X	X	X	X	√	X	√	X	√	X	√	X	√	X	√	X	X	X	X
	Galvanically isolated communication ports	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	Fire retardant material housing	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Housing Front facia IP-54, Back IP-30	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
FAULT MONITORING & CAP.TRIPPING	Contactor coils voltage over / under value	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Over & Under Voltage on meas. Voltage	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	PFC power shutoff protection for excess Over-voltage	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Supply Voltage Over-frequency and Under-frequency	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Capacitor/Inductor Over and Under current	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Capacitor step VAR health monitor & selective trip	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Capacitor step user masking	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Supply Voltage, Current Over-harmonics	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Capacitor/Inductor Current over harmonics	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Capacitor/Inductor Earth Fault / Neutral current trip	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Capacitor step over-utilization selective trip	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	PFC electronics & memory self monitoring faults	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Over Temperature internal to PFC unit	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Over Tempeature sensed by external PT100 RTD	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ALARMS & AUX.Function	Fan control by over temperature	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Step/s declared faulty & masked	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Indicative Fault / Event alarm	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Step/s (1 or more) trip alarm	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Auto-synchronization failure alarm	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Cap. Step earth fault / neutral current alarm	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	RTC-real time clock needs setting: alarm	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	GPRS communication data lost alarm	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	GPRS network strength weak alarm	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Unit functioning without any fault indicator	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√

TAS PowerTek

Features/Models

√ - Available
X - Not Available
• - Optional

		3-CT PFC																																							
		SPF-21Y/FK6DCTO	SPF-21Y/FT6DCTO	SPF-21Y/FK3DCTO	SPF-21Y/FT3DCTO	SPF-21Y/AK3DCTO	SPF-21Y/AT3DCTO	SPF-21Y/FK3NNNO	SPF-21Y/FT3NNNO	SPF-21Y/AK3NNNO	SPF-21Y/AT3NNNO	SPF-21Y/FK3NMNO	SPF-21Y/AK3NMNO	SPF-21Y/FK1NMNO	SPF-21Y/AK1NMNO	SPF-21Y/FK1NNNO	SPF-21Y/AK1NNNO	APF-09Y/4K1	APF-09Y/4T1	APF-09Y/6K1	APF-09Y/6T1	APF-09Y/8K1	APF-09Y/8T1	APF-09Y/AK1	APF-09Y/AT1	APF-09Y/CK1	APF-09Y/CT1	SPF-21X/8K1MO	SPF-21X/8T1MO	SPF-21X/4K1NO	SPF-21X/6K1NO	SPF-21X/8K1NO	SPF-21X/8T1NO
APPLICATION FEATURES	EASY EDIT settings for standard LV usage	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
	PC programmable EXPERT EDIT remote upload	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	HV APFC system usage	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Steps Capacitor testing mode	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Fixed capacitor banks step declaration by user	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Fixed or Proportionate Correction time - user set	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Mono-phase compensation with Cap & Ind. VAR	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Inductive VAR compensation for 3-ph & per-ph.	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	User friendly Keyboard for front operations	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Capacitor step status on front LCD	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Adjustable C/K:Offset & VAR band width to Target PF	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
	Automatic Supply V & A synchronization	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	•	•	•	•	•	•	•	•	•	•	√	√	√	√	√	√
	Automatic step VAR detection	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Manual wiring V & A synchronization	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Expansion of steps by additional module	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Dual PF settings for Generator & Grid supply	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Voltage & Current sensing on 2 sides of transformer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Remote communication for VAR compensation	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	HV side sensing and LV side compensation	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	LV side sensing & compensation with HV side control	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	4-quadrant operation for Solar/Wind generation	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	High speed cycle to cycle control with Thy.version	X	√	X	√	X	√	X	√	X	√	X	X	X	X	X	X	X	√	X	√	X	√	X	√	X	√	X	√	X	X	X	X
	PC-Application program for data view & log	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	Two X'mer with 2 APFC with bus coupler operation	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Monthly auto reset of MD / Energy values	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Password protected user settings	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	"I AM OK" self monitoring health indicator (LED / LCD)	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Data Logging (PQ ANALYSIS) & IoT (SCADA)	Internal data log memory of 3.9M-bit	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Log of user programmable size interval data	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Log of user programmable time interval data	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Fault / Event data up to last 250 records on FIFO	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Daily stored parameter log up to 4 months	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Real time data availability on MODBUS (RS-485)	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	Real time data by GPRS https:// to web server	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Logged data by GPRS https:// on web server	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	User settings by PC-App "PFC_DATAVIEW"	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	User settings by GPRS https:// to web server	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	RTC clock auto update when connected to GPRS	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	MODBUS declaration of any step masked or usable	√	√	√	√	√	√	X	X	X	X	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	√	√	X	X	X	X
	Remote firmware update services	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	PC-App with facility for GPRS Web view	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Secured end to end GPRS communication	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TYPE TEST CERTIFICATIONS	CE	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	ROHS	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	EMC	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	EMI	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	SAFETY Voltage category III	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Environmental	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	IP Enclosure	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Pollution Degree III compliance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X	X	X	X	X	X	X	X	•	•	•	•	•	•
	Accuracy of Measurement as defined	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Galvanic isolation insulation standards	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	X	X	X	X	X	X	X	X	X	X	√	√	√	√	√	√
	Storage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X	X	X	X	X	X	X	X	•	•	•	•	•	•
	Handling safety	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X	X	X	X	X	X	X	X	•	•	•	•	•	•