SMARTPACK

Smartpack Configuration Sheet

Form 273-2 Doc 2011800 rev 2.02 Modified by Rasto Laco ©

Prepared by:	Marraksk	System Part no.: ETT20434.004		Smartpack part no.: 242100.110		SW Rev: 3.10	Doc no.: 2193878		Doc rev: 1
Approved by:	IFS	CTO: ☐		Mains input: 3PH 400Vac		System type: ○ 60V ◉ 48V ○ 24V			

Note! If any customer changes are made in this document, they will overwrite the default values in the Smartpack.

Para	Site Info	DEFAULT VALUE	CUSTOMER DEFINE TEXT
1.1	Company	<Blank>	
1.2	Model	Flatpack 2 Power System	

Para	System Voltage Levels	DEFAULT VALUE	CUSTOMER DEFINE	
			Value	Function
2.1	Nominal Voltage (float)	53,52V		
2.2	Boost Voltage	54,50V		
2.3	Battery Contactor LVBD	Enabled		
2.4	Battery Disconnect Voltage - LVBD	43,0V		
2.5	Battery Reconnect Voltage - LVBD	47,0V		
2.6	LVBD Temperature Dependent	Disabled		
2.7	Load Contactor LVLD 1	Disabled		
2.8	Load Disconnect Voltage - LVLD 1	44,0V		
2.9	Load Reconnect Voltage - LVLD 1	48,0V		
2.10	LVLD1 Disconnect Delay Timer	Disabled		
2.11	Load Contactor LVLD 2	Not configured		
2.12	Load Disconnect Voltage - LVLD 2	Not configured		
2.13	Load Reconnect Voltage - LVLD 2	Not configured		
2.14	LVLD2 Disconnect Delay Timer	Not configured		
2.15	Rectifier Current limit	Disabled (1000Amp)		
2.16	Rectifier standby voltage	1,85V/cell 44,40V		
2.17	Battery Charge current limit	Disabled		
2.18	Battery Charge current limit (Mains)	100Amp		
2.19	Battery Charge current limit (Generator)	100Amp		
2.20	Battery test end voltage	1,9V/cell (45,60V)		

Para	Programmable Inputs	DEFAULT VALUE	CUSTOMER DEFINE			
			New Description	Funtion	Alarm Group	Event
3.1	PROG INPUT 1.1	Disabled	SPD Alarm	Enabled	Normally closed	SPD Alarm	Major Alarm
3.2	PROG INPUT 81.1	Disabled	Door Alarm	Enabled	Normally closed	Door Alarm	Major Alarm
3.3	PROG INPUT 81.2	Disabled	Aircon Alarm	Enabled	Normally closed	Enviroment	Major Alarm
3.4	PROG INPUT 81.5	Disabled	Smoke Alarm	Enabled	Normally closed	Enviroment	Major Alarm

Para	Set Alarm Levels	DEFAULT VALUE	ALARM GROUP NAME DEFAULT	CUSTOMER DEFINE		
				Value	Alarm Group	Funtion
4.1	Mains Low Alarm	Enabled				
4.2	Mains Low Major alarm	2 Phase	Mains Alarm			
4.3	Mains Low Minor alarm	1 Phase	Mains Alarm			
4.4	MainsVolt 1 Alarm	Enabled				
4.5	MainsVolt 1 Major High	280V	Mains Alarm			
4.6	MainsVolt 1 Minor High	260V	Mains Alarm			
4.7	MainsVolt 1 Minor Low	100V	Mains Alarm			
4.8	MainsVolt 1 Major Low	80V	Mains Alarm			
4.9	MainsVolt 2 Alarm	Enabled				
4.10	MainsVolt 2 Major High	280V	Mains Alarm			
4.11	MainsVolt 2 Minor High	260V	Mains Alarm			
4.12	MainsVolt 2 Minor Low	100V	Mains Alarm			
4.13	MainsVolt 2 Major Low	80V	Mains Alarm			
4.14	MainsVolt 3 Alarm	Enabled				
4.15	MainsVolt 3 Major High	280V	Mains Alarm			
4.16	MainsVolt 3 Minor High	260V	Mains Alarm			
4.17	MainsVolt 3 Minor Low	100V	Mains Alarm			
4.18	MainsVolt 3 Major Low	80V	Mains Alarm			
4.19	Rectifier Current Alarm	Disabled				
4.20	Rectifier Current Major alarm	5000Amp	Major alarm			
4.21	Rectifier Current Minor alarm	4000Amp	Minor alarm			
4.22	Rectifier Error Alarm	Enabled				
4.23	Rectifier Error Major alarm	2 Units	Rectifier Alarm			
4.24	Rectifier Error Minor alarm	1 Unit	Rectifier Alarm			
4.25	Rectifier CommError Alarm	Enabled				
4.26	Rectifier CommError Major alarm	2 Units	Rectifier Alarm			
4.27	Rectifier CommError Minor alarm	1 Unit	Rectifier Alarm			
4.28	Rectifier Capasity Alarm	Disabled				
4.29	Rectifier Capasity Major alarm	95%	Major alarm			
4.30	Rectifier Capasity Minor alarm	90%	Minor alarm			
4.31	Recitifer CurrentShare Alarm	Disabled				
4.32	Rectifier CurrentShare Major al	10%	Major alarm			
4.33	Rectifier CurrentShare Minor al	5%	Minor alarm			
4.34	Load Current Alarm	Disabled				
4.35	Load Current Major alarm	30000Amp	Major alarm			
4.36	Load Current Minor alarm	20000Amp	Minor alarm			
4.37	LoadFuse 1 Major Alarm	Enabled	Fuse alarm			
4.38	BatteryVoltage Alarm	Enabled				
4.39	BatteryVoltage Major High	57,0V	Battery High			
4.40	BatteryVoltage Minor High	56,8V	Minor Alarm			
4.41	BatteryVoltage Minor Low	47,0V	Minor Alarm			
4.42	BatteryVoltage Major Low	46,3V	Battery Low			
4.43	BatteryCurrent Alarm	Disabled				
4.44	BatteryCurrent Major High	500Amp	Major Alarm			
4.45	BatteryCurrent Minor High	300Amp	Minor Alarm			
4.46	BatteryCurrent Minor Low	-300Amp	Minor Alarm			
4.47	BatteryCurrent Major Low	-500Amp	Major Alarm			
4.48	Battery Tempsense 1.1	Enabled				
4.49	Battery Tempsense 1.2	Disabled				
4.50	BatteryTemp Alarm	Disabled				
4.51	BatteryTemp Major High	40°C	Major Alarm			
4.52	BatteryTemp Minor High	30°C	Minor Alarm			Enabled
4.53	BatteryTemp Minor Low	-5°C	Minor Alarm			
4.54	BatteryTemp Major Low	-10°C	Major Alarm			
4.55	BatteryLifeTime Alarm	Disabled				
4.56	BatteryLifeTime Major Alarm	100 days	Major Alarm			
4.57	BatteryLifeTime Minor Alarm	100 days	Minor Alarm			
4.58	BatteryQuality Alarm	Enabled				
4.59	BatteryQuality Major Alarm	75%	Major Alarm			
4.60	BatteryQuality Minor Alarm	80%	Minor Alarm			

Para	Set Alarm Levels	DEFAULT VALUE	ALARM GROUP NAME DEFAULT	Value	CUSTOMER DEFINE Alarm Group		Funtion
4.61	BatteryTotCap Alarm	Disabled					
4.62	BatteryTotCap Major Alarm	75%	Major Alarm				
4.63	BatteryTotCap Minor Alarm	80%	Minor Alarm				
4.64	BatteryRemCap Alarm	Disabled					
4.65	BatteryRemCap Major Alarm	20%	Major Alarm				
4.66	BatteryRemCap Minor Alarm	25%	Minor Alarm				
4.67	Symmetry Measurement	Disabled					
4.68	Measure Type	Middle (24V)					
4.69	Mode	Continuous					
4.70	Discharge Delay (Min)	0					
4.71	Symmetry tolerance Major alarm	1,5V	Major alarm				
4.72	Symmetry tolerance Minor allarm	1,0V	Minor alarm				
4.73	BatteryFuse 1.1 Major Alarm	Enabled	Fuse alarm				
4.74	BatteryFuse 1.2 Major Alarm	Disabled	Fuse alarm				
4.75	Battery test (ongoing)		None Selected				
4.76	Boost (ongoing)		None Selected				

Para	Alarm Output Relay configuration								
		Alarm output 1	Alarm output 2	Battery contactor	Load contactor	Alarm output 3	Alarm output 4	Alarm output 5	Alarm output6
5.1	Default Relay Config:	Normally activated	Normally activated	Latched contactor	Latched contactor	Normally activated	Normally activated	Normally activated	Normally activated
5.2	Customer Relay Config:								

Para	Alarm Groups	DEFAULT VALUE	CUSTOMER DEFINE New Description	Smartpack relays Relay	Relay	I/O Monitor relays Relay	Relay
6.1	Major Alarm	Relay 1					
6.2	Minor Alarm	Relay 1					
6.3	Mains Alarm	Relay 1 & 2					
6.4	Fuse Alarm	Relay 1 & 3					
6.5	Battery High	Relay 1 & 4					
6.6	Battery Low	Relay 1 & 5					
6.7	Rectifier Alarm	Relay 1 & 6					
6.8	AlarmGroup 8	<None>	SPD Alarm	Relay 1			
6.9	AlarmGroup 9	<None>					
6.10	AlarmGroup 10	<None>	Door Alarm			Relay 2	
6.11	AlarmGroup 11	<None>	Enviroment			Relay 3	
6.12	AlarmGroup 12	<None>					
6.13	AlarmGroup 13	<None>					
6.14	AlarmGroup 14	<None>					
6.15	AlarmGroup 15	<None>					
6.16	AlarmGroup 16	<None>					
6.17	AlarmGroup 17	<None>					
6.18	AlarmGroup 18 (Alarms Blocked)	<None>					
6.19	LVBD	Battery Contactor					
6.20	LVLD 1	Load Contactor					
6.21	<Blank> (Dedicated to LVLD2)	<None>					

Para	Battery configuration	DEFAULT VALUE	CUSTOMER DEFINE Value	Function
7.1	Battery type Description	Eltek standard		
7.2	Capacity (Ah pr.string)	100Ah		
7.3	Number of Batt Banks (No of Smartpacks)	1		
7.4	Number of Battery Strings (#)	1	2	
7.5	Temperatur Compensation	Disabled		
7.6	Reference voltage (V/cell)	2,23V/cell	See para 2.1	Enabled
7.7	Reference temperature (°C)	20°C		
7.8	Temperature slope (mV/°C/cell)	3,00 mV/°C/cell		
7.9	Min compensation voltage (V/cell)	2,10V/cell		
7.10	Max compensation voltage (V/cell)	2,35V/cell		
7.11	Battery Test Type	Normal test		
7.12	End voltage (V/cell)	End voltage 1.9(V/cell)		
7.13	Test duration (min)	Disabled (720min)		
7.14	Guard time (hours)	Disabled (12h)		
7.15	Max. Discharge (Ah)	Disabled (100Ah)		
7.16	Automatic test	Disabled		
7.17	Interval test	Disabled		
7.18	Next start date	19.06.2007		
7.19	Next start time	12:00		
7.20	Interval period (days)	180days		
7.21	Manual boost Max duration (min)	120min		
7.22	Interval boost	Disabled		
7.23	Max duration (min)	120min		
7.24	Next start date	19.06.2007		
7.25	Next start time	12:00		
7.26	Interval period (days)	180days		
7.27	Automatic boost	Disabled		
7.28	Max duration (min)	120min		
7.29	Charge factor (%)	100%		
7.30	Discharge threshold (Ah)	1Ah		

Para	Battery table configuration	DEFAULT VALUE	CUSTOMER DEFINE VALUE
8.1	Battery Table High end volt (ref 1)	1,90 V/cell	
8.2	Battery Table Low end volt (ref 2)	1,75V/cell	
	Insert Battery Table if available (Amp)		
8.3	Min		
8.4	Ref 1		
8.5	Ref 2		

Para	System configuration	DEFAULT VALUE	CUSTOMER DEFINE VALUE	
9.1	Temperature scale	Celsius		
9.2	System polarity	Positive		
9.3	Critical premises	Mains Minor Low		
9.4	Current shunt 1 Shunt type (mV)	60mV		
9.5	Current shunt 1 Shunt size (A)	200A	200A	
9.6	Current shunt 2 Shunt type (mV)	60mV		
9.7	Current shunt 2 Shunt size (A)	200A		
9.8	Number of mains phases	3 phase		
	CUSTOMER DEFINE OTHER SPECIFICATIONS			
10.1	System includes Hybrid unit			
10.2				
10.3	Set Cooling set point B1 25°C			