



REFERENCE		SI-ESF-M- P125-54				
ELECTRICAL CHARACTERISTICS		STC				
Maximum Power	[Pmpp]	Wp	150	155	160	165
Power selection	[Pmpp]	Wp	0/+5			
Voltage at Maximum Power	[Vmpp]	Volts	27,16	27,70	28,08	28,57
Current at Maximum Power	[Impp]	Amperes	5,52	5,61	5,70	5,79
Open Circuit Voltage	[Voc]	Volts	33,03	33,67	34,07	34,55
Short Circuit Current	[Isc]	Amperes	5,78	5,92	6,03	6,13
Maximum System Voltage	[Vsys]	Volts	1500 / 1000			
Maximum Series Fuse Rating	[Icf]	Amperes	15			
Efficiency	[η]	%	15,48	16,04	16,52	17,07
Form Factor	[FF]	%	78,53	77,96	77,91	78,11
ELECTRICAL CHARACTERISTICS		NMOT				
Maximum Power	[Pmpp]	Wp	110	115	118	122
Voltage at Maximum Power	[Vmpp]	Volts	24,73	25,22	25,57	26,01
Current at Maximum Power	[Impp]	Amperes	4,48	4,56	4,63	4,70
Open Circuit Voltage	[Voc]	Volts	30,19	30,77	31,14	31,58
Short Circuit Current	[Isc]	Amperes	4,69	4,80	4,89	4,97
MECHANICAL CHARACTERISTICS						
Dimensions	(X)	mm	808			
	(Y)	mm	1199			
	(Z)	mm	35			
	(area)	m ²	0,97			
Weight		kg	11,19			
Frame		Material	Al-6063-T5			
		mm	35			
Front		Material	Glass			
		mm	3,2			
Encapsulant		Material	EVA			
		mm	0,38			
Cells		Type	mc-Si			
		Size	125 x 125			
		Matrix	6 x 9			
		Quantity	54			
Encapsulant		Material	EVA			
		mm	0,38			
Rear		Material	TPT			
		mm	0,5			
JUNCTION BOX						
Protection	Grade	IP	65			
Diodes	Bypass	Quantity	4			
		Quantity	2			
Cables	(+/)	Length	900			
		Section	4			
		Type	MC-T4			
Connectors	(+/)	Quantity	2			
THERMAL CHARACTERISTICS						
Temperature coefficient of short circuit current α	[Isc]	%/°C	0,0825			
Temperature coefficient of open circuit voltage β	[Voc]	%/°C	-0,4049			
Temperature coefficient of maximum power γ	[Pmpp]	%/°C	-0,4336			
Temperature coefficient of current at maximum power	[Impp]	%/°C	0,1			
Temperature coefficient of voltage at maximum power	[Vmpp]	%/°C	-0,38			
Nominal Module Operating Temperature	[NMOT]	°C	47±2			
TOLERANCES						
Working temperature		°C	-40/+85			
Dielectric Isolation Voltage		V/DC	3000			
Relative humidity		%	0/+100			
Wind resistance		Pa	2400			
Mechanical load-bearing capacity		Pa	5400			
Maximum hail resistance		Ø	28			
		m/s	23			
Conductivity at ground		Ω	≤ 0,1			
Resistance		Ω	≥ 100			
CLASSIFICATIONS						
Application		Class	A			
Electrical protection		Class	II			
Fire resistance		Class	C			
Pollution		Degree	1			
Material		Group	I			
Safety		Factors	1.5			
GUARANTEES						
Manufacturing Defects		Years	12			
Performance	90% of rated power	Years	12			
	80% of rated power	Years	25			

