



REFERENCE		SI-ESF-M- M125-96				
<b>ELECTRICAL CHARACTERISTICS</b>		<b>STC</b>				
Maximum Power	[Pmpp]	Wp	275	280	285	290
Power selection	[Pmpp]	Wp	0/+5			
Voltage at Maximum Power	[Vmpp]	Volts	49,82	49,92	50,02	50,11
Current at Maximum Power	[Impp]	Amperes	5,52	5,61	5,70	5,79
Open Circuit Voltage	[Voc]	Volts	60,59	60,67	60,68	60,60
Short Circuit Current	[Isc]	Amperes	5,78	5,92	6,03	6,13
Maximum System Voltage	[Vsyst]	Volts	1500 / 1000			
Maximum Series Fuse Rating	[Icf]	Amperes	15			
Efficiency	[η]	%	16,28	16,58	16,88	17,18
Form Factor	[FF]	%	78,53	77,97	77,92	78,10
<b>ELECTRICAL CHARACTERISTICS</b>		<b>NMOT</b>				
Maximum Power	[Pmpp]	Wp	203	206	210	214
Voltage at Maximum Power	[Vmpp]	Volts	45,36	45,45	45,54	45,63
Current at Maximum Power	[Impp]	Amperes	4,48	4,56	4,63	4,70
Open Circuit Voltage	[Voc]	Volts	55,38	55,45	55,46	55,39
Short Circuit Current	[Isc]	Amperes	4,69	4,80	4,89	4,97
<b>MECHANICAL CHARACTERISTICS</b>						
Dimensions	(X)	mm	1069			
	(Y)	mm	1580			
	(Z)	mm	45			
	(area)	m <sup>2</sup>	1,69			
Weight		kg	19,13			
Frame		Material	Al-6063-T5			
		mm	45			
Front		Material	Glass			
		mm	3,2			
Encapsulant		Material	EVA			
		mm	0,38			
Cells		Type	sc-Si			
		Size	125 x 125			
		Matrix	8 x 12			
		Quantity	96			
Encapsulant		Material	EVA			
		mm	0,38			
Rear		Material	TPT			
		mm	0,5			
<b>JUNCTION BOX</b>						
Protection	Grade	IP	65			
Diodes	Bypass	Quantity	6			
		Quantity	2			
Cables	(+/ -)	Length	900			
		Section	4			
		Type	MC-T4			
Connectors	(+/ -)	Quantity	2			
<b>THERMAL CHARACTERISTICS</b>						
Temperature coefficient of short circuit current α	[Isc]	%/° C	0,0814			
Temperature coefficient of open circuit voltage β	[Voc]	%/° C	-0,391			
Temperature coefficient of maximum power γ	[Pmpp]	%/° C	-0,5141			
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			
<b>TOLERANCES</b>						
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			
<b>CLASSIFICATIONS</b>						
Application		Class	A			
Electrical protection		Class	II			
Fire resistance		Class	C			
Pollution		Degree	1			
Material		Group	I			
Safety		Factors	1.5			
<b>GUARANTEES</b>						
Manufacturing Defects		Years	12			
Performance	90% of rated power	Years	12			
	80% of rated power	Years	25			

