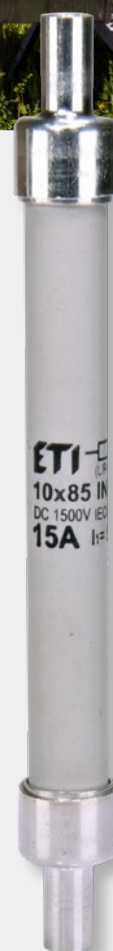


Applications

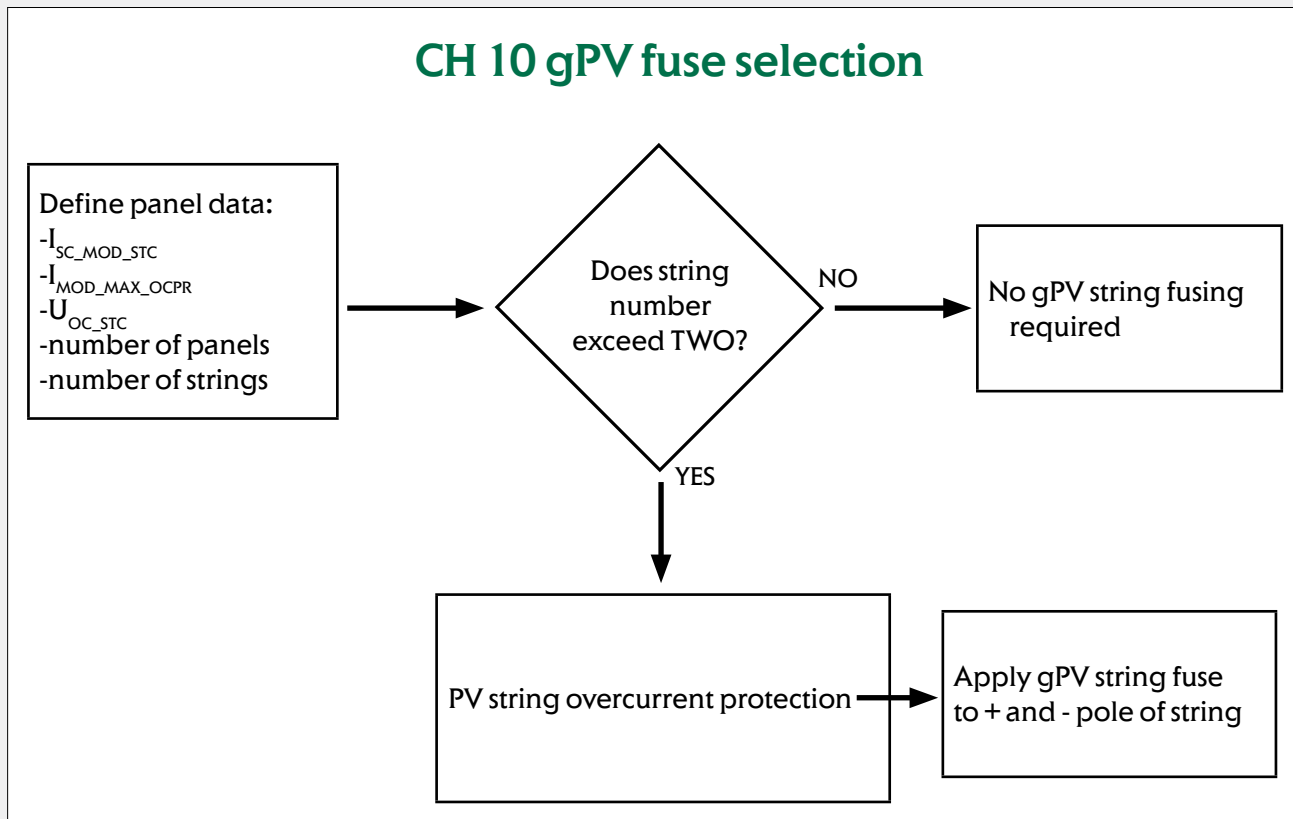


PROTECTION OF PV SYSTEMS



Photovoltaic String Protection

CH 10 gPV fuse selection



PV string overcurrent protection:

$I_n > 1,5 \times I_{SC_MOD_STC}$ – the short circuit current of a PV module or PV string st STC

$I_n < 2,4 \times I_{SC_MOD_STC}$

$I_n \leq I_{MOD_MAX_OCPR}$ – the PV module max. overcurrent protection rating

$U_n \geq 1,2 \times U_{OC_STC \times \text{No. of PV modules}}$

I_n – nominal overcurrent protection rating

U_n – nominal overcurrent protection voltage

Use temperature derating factor.

ETI as one of the most important European producer of overcurrent protection equipment and devices participating in many working groups for standards development at International Electrotechnical Commission (IEC). ETI is member of maintenance team MT9 belonging to the 32B group, working on the part 6 of the IEC 60269 dealing with supplementary requirements for fuse-links for the overcurrent protection of solar photovoltaic energy systems.

gPV fuse-link must be selected acc. standard IEC 62548

CH14 gPV 1000V, 1100V - Fuse-links

General characteristics

Rated voltage	1000V d.c. L/R=2ms (1100V d.c. for 002637185)
Rated current	15-36A
Breaking capacity	30kA d.c.
Standards	IEC 60269-6
Application	For protection of photovoltaic modules



CH14x51 gPV 1000V d.c.

Size	Breaking capacity [kA]	I_n [A]	Code No. "standard contacts" 30kA IEC	Code No. "type SU contacts" 30kA IEC	Pre-arcing Joule integral [A ² s] L/R=2ms	Operating Joule integral [A ² s] L/R=2ms	Power dissipation [0,7 x I _n ²] P _d [W]	Power dissipation [I _n ²] P _d [W]	Weight [g]	Packaging [pcs]
14x51	30kA	15	002637140	002637340	22	237	1,4	3,1	19 SU: 21	10/200 SU:10/260
		16	002637105	002637305	55	155	1,4	3,1		
		16*	002637185	/	55	220	1,4	3,1		
		20	002637107	002637307	130	330	1,5	3,2		
		25	002637109	002637309	180	360	2	4		
		32	002637111	002637311	297	1.290	2,1	5,1		
		36	002637115	002637315	450	1.190	2,3	5,6		

*Rated voltage 1100V d.c.

