

**Declaration related to the use of A type residual current circuit breakers in compliance with article 712.413.1.1.1.2, Section 712 of Standard CEI 64-8/7**

DELIOS inverters listed in the following table are fitted with a residual current monitoring unit (RCMU\*) tested in compliance with safety standard required by Standard IEC/EN 62109-2:2011 (please refer to paragraph 4.8.3.5 of the above mentioned Standard).

1. Features of static conversion equipment				
<b>Brand:</b>	DELIOS s.r.l.			
<b>Model:</b>	DLS 230AC	DLS 300 - DLS 300C DLS 300AC	DLS 450 - DLS 450C DLS 450H - DLS 450AC	DLS 600 - DLS 600L DLS 600C
<b>FW Version:</b>	1.10 and next versions			
<b>No. of poles:</b>	1P+N			
<b>Nominal power:</b>	1.7kVA	3kVA	4.5kVA	6kVA
<b>Nominal voltage:</b>	230V			

**DELIOS s.r.l. declares that the inverters without a transformer, as shown in the table of this document, due to their manufacturing features, do not cause direct currents to be sent to ground and therefore, in compliance with article 712.413.1.1.1.2 of Section 712 of Standard CEI 64-8/7, do not require a B type circuit breaker to be installed downstream, according to standard IEC 60755/A2.**

**NOTE:** A built-in RCMU only protects the system from earth leakages occurring upstream of the inverter AC terminals (i.e. towards the DC side of the PV system and therefore towards the PV modules). Leakage currents that could occur in the CA section between the pick up/entering point and the inverter are not detected and require an external protective device. As for protecting the AC line, according to the information provided above with regards to the built-in differential protection in the DLS series inverters listed in the table, a type B circuit breaker is not required.

We recommend using a type A magnetic thermal circuit breaker with sensitivity of  $ID_n=100\text{mA}$  or higher in order to prevent false operations, caused by the normal capacitive leakage current of the PV modules.

\*RCMU: Residual Current Monitoring Unit

**DELIOS s.r.l.**

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