

Product Information

Integrated safety inverter FR-E700SC-EC

Herewith we would like to inform you about the arrival of the new Inverter series FR-E700SC-EC with integrated Safe torque off (STO) functionality (complies with EN ISO 13849-1 Category 3 / PLd EN62061 / IEC61508 SIL2)

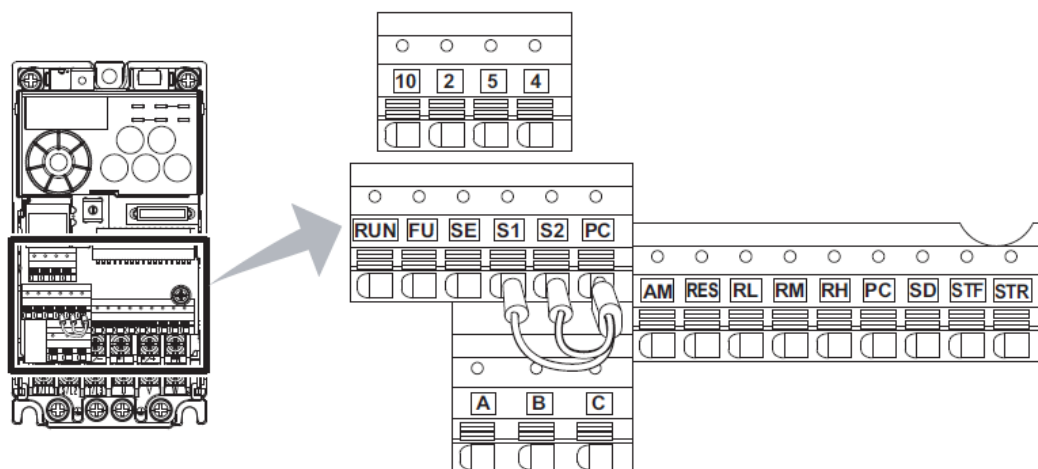
The FR-E700SC-EC inverter is the successor of the standard FR-E700 type and has the same technical specifications upgraded by the safety function. You can use options like communication options, filters, etc. for FR-E700SC-EC like for the standard E700. The narrow difference is the bigger depth (6mm), due to change from screw terminals to advanced spring clamps.

With this integrated safety terminal block the FR-E700SC-EC has the same safety features as the FR-D700



● Control circuit terminal layout

Recommend wire size:
0.3mm² to 0.75mm²



FR-E700-EC		FR-E700SC-EC		
Type	SAP Code	Type	SAP Code	Power [kW] 150% for 60s 200% for 3s
FR-E720S-008-EC	219221	FR-E720S-008SC-EC	234795	0,1
FR-E720S-015-EC	219222	FR-E720S-015SC-EC	234796	0,2
FR-E720S-030-EC	217895	FR-E720S-030SC-EC	234797	0,4
FR-E720S-050-EC	217896	FR-E720S-050SC-EC	234798	0,75
FR-E720S-080-EC	217897	FR-E720S-080SC-EC	234799	1,5
FR-E720S-110-EC	217898	FR-E720S-110SC-EC	234800	2,2
FR-E740-016-EC	211955	FR-E740-016SC-EC	234801	0,4
FR-E740-026-EC	211956	FR-E740-026SC-EC	234802	0,75
FR-E740-040-EC	211957	FR-E740-040SC-EC	234803	1,5
FR-E740-060-EC	211958	FR-E740-060SC-EC	234804	2,2
FR-E740-095-EC	211959	FR-E740-095SC-EC	234805	3,7
FR-E740-120-EC	211960	FR-E740-120SC-EC	234806	5,5
FR-E740-170-EC	211961	FR-E740-170SC-EC	234807	7,5
FR-E740-230-EC	211962	FR-E740-230SC-EC	234808	11
FR-E740-300-EC	211963	FR-E740-300SC-EC	234809	15

Communication option:

Please note, for FR-E700SC-EC there are the same communication options available like in standard FR-E700-EC, but you have to use the E kit-**SC** types. However, it is not possible to use the FR-E7TR option.

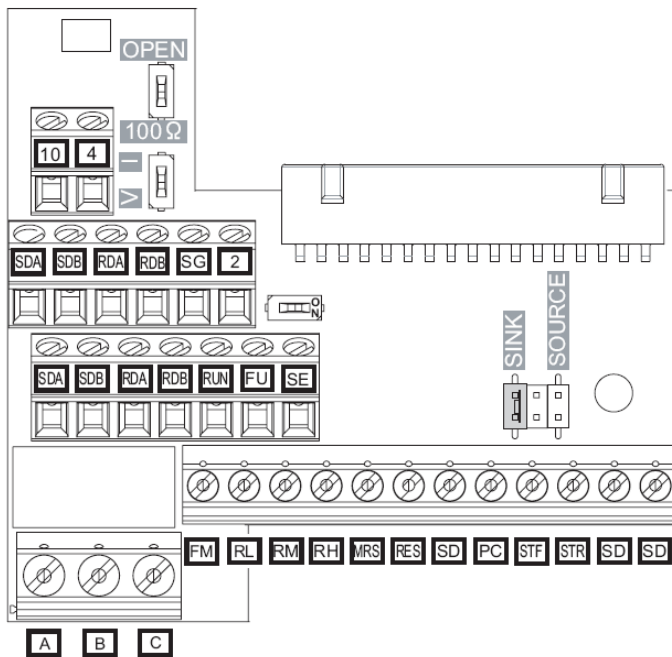
Ekit-SC		
Ekit-SC	SAP Code	Description
FR-A7AX-Ekit-SC-E	239641	12-bit digital input function for FR-E700SC
FR-A7AY-Ekit-SC-E	239642	Digital output; expansion analog output function for FR-E700SC
FR-A7AR-Ekit-SC-E	239643	3 optional Relay outputs for FR-E700SC
FR-A7NC-Ekit-SC-E	239644	CC-Link Network connection for FR-E700SC
FR-A7NL-Ekit-SC-E	239645	LonWorks Network connection for FR-E700SC
FR-A7NP-Ekit-SC-E	239646	Profibus Network connection for FR-E700SC
FR-A7NP-Ekit-SC-E-01	239647	Profibus Network connection for FR-E700SC with D-Sub connector
FR-A7ND-Ekit-SC-E	239648	DeviceNet Network connection for FR-E700SC

In case of a supply shortfall of the E kit-SC types, you can also order the standard E kit for E700 and an E Kit cover SC-E and assemble by yourself. See allocation table below:

Ekit-SC (assembly by yourself)			
E kit	SAP Code		Ekit Cover SC-E
FR-A7AX E kit	210668	+	FR-A7AX E kit cover SC-E
FR-A7AY E kit	210669	+	FR-A7AY E kit cover SC-E
FR-A7AR E kit	210670	+	FR-A7AR E kit cover SC-E
FR-A7NC E kit	210671	+	FR-A7NC E kit cover SC-E
FR-A7NL E kit	210672	+	FR-A7NL E kit cover SC-E
FR-A7NP E kit	210673	+	FR-A7NP E kit cover SC-E
FR-A7NP Ekit-01- E	235396	+	FR-A7NP E kit cover SC-E
FR-A7ND E kit	210704	+	FR-A7ND E kit cover SC-E

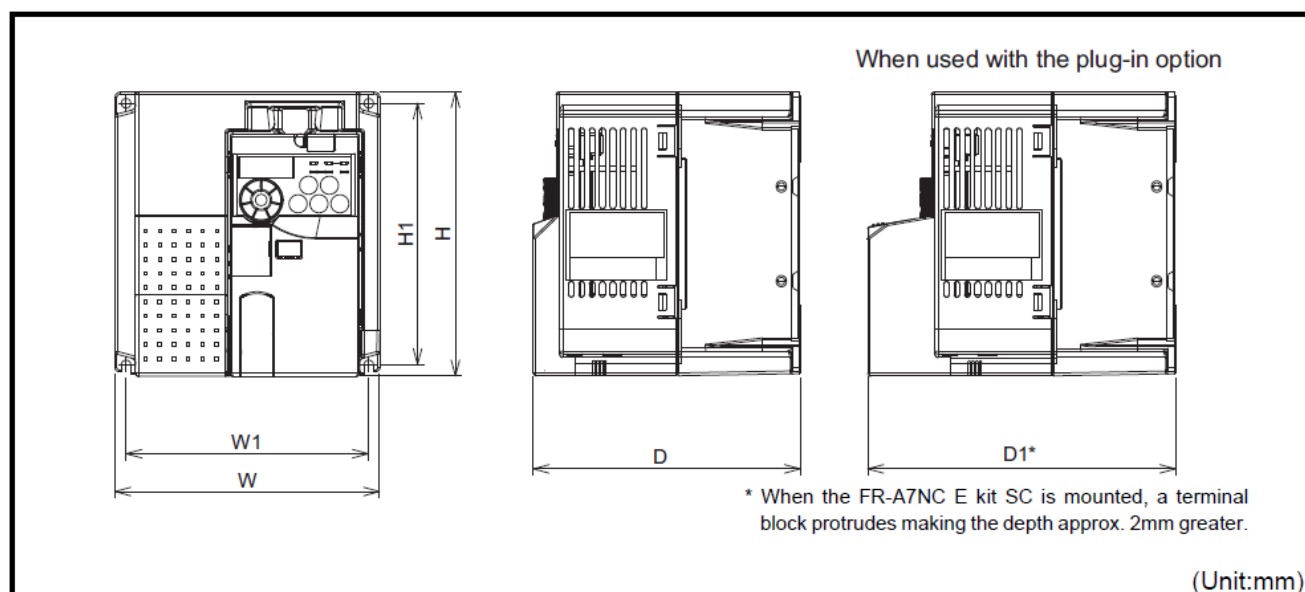
Using FR-E7TR boards on E700 Safety Version.

The standard E700 option board FR-E7TR (shown below) does not have the safety connections on it, therefore it is **not possible** to use this on the E700 Safety Version. The only way to connect RS485 to the E700 safety is through the RJ45 port.



Dimensions:

The technical drawings are available from the confidential Homepage.
Below is a general schematic diagram as sample



• Three-phase 400V class

Inverter Model	W	W1	H	H1	D	D1
FR-E740-016SC	140	128	150	138	120	141.6
FR-E740-026SC					141	162.6
FR-E740-040SC						
FR-E740-060SC					220	208
FR-E740-095SC						
FR-E740-120SC	195					
FR-E740-170SC						
FR-E740-230SC						
FR-E740-300SC						

• Single-phase 200V class

Inverter Model	W	W1	H	H1	D	D1
FR-E720S-008SC	68	56	128	118	86.5	108.1
FR-E720S-015SC						
FR-E720S-030SC						
FR-E720S-050SC	108	96			141.5	163.1
FR-E720S-080SC					167	188.6
FR-E720S-110SC			140	128	150	138