



BLDC COMPRESSOR DRIVERS



Project Engineering
CONTROLLI & SISTEMI

BLDC COMPRESSOR DRIVERS

Project Engineering has developed a family of BLDC drivers specifically designed for refrigeration and air conditioning compressors equipped with brushless motor. These drives are OEM products designed to meet the needs of manufactures that want to take advantage of the higher efficiency of BLDC compressors (compared to AC compressors), following the actual market requirements focused on energy saving and high efficiency.

Being OEM-oriented products, Project Engineering is available to develop the software features needed to drive any compressor meeting the hardware limits of its drivers. At the current stage, the drivers have been fully verified with the following compressors:

Driver model	Compatible compressor model
DV1PRA	SIAM SNB 130F SIAM SNB 172F SIAM ANB 33 SIAM ANB 52 TOSHIBA DA 330 A2F ⁽¹⁾
DV1PRB	SIAM SNB130F SIAM SNB172F
DV2PRD⁽¹⁾	SIAM SNB130F

⁽¹⁾ Under development

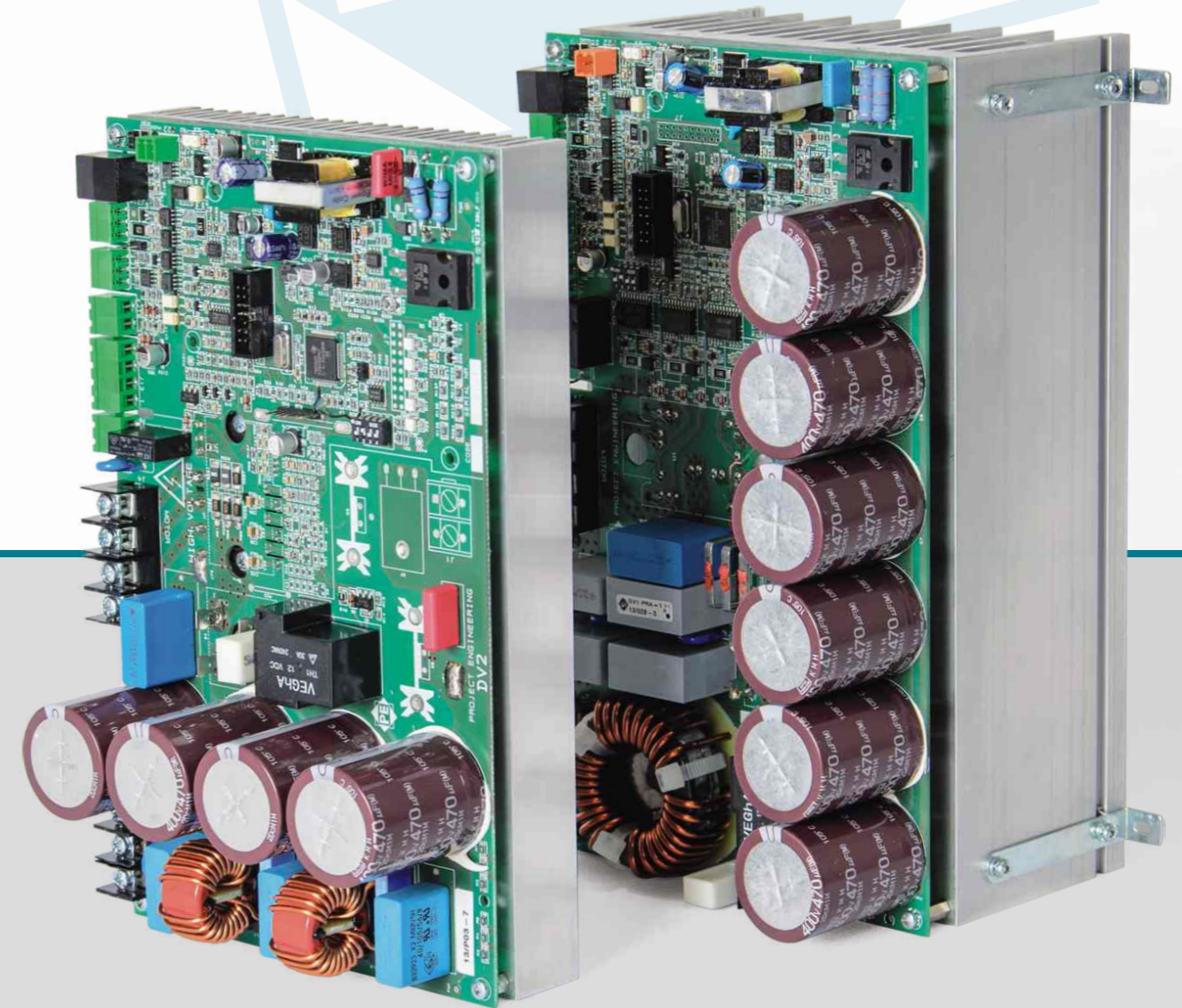
BLDC compressor drivers family overview:

Model	DV1PRA	DV1PRB	DV2PRD ⁽²⁾
Max current	22 A	15 A	9 A
Power supply	Three-phase	Three-phase	Single phase
PFC	NO	NO	YES
Overall size	260x150mm	260x150mm	244x150mm
Component maximum height	50mm	50mm	50mm
Total maximum heigh	144mm	144mm	101mm
Weight	4.5 kg	4.5 kg	2.5 kg

Family common features

- MODBUS communication for operation and configuration (opto-isolated RS485 port)
- Hardware protections
 - Trip Current & load short circuit
 - External disable (24Vac /dc digital Input)
- Protections with software limits
 - Overcurrent
 - Over temperature
 - Under /over voltage and missing phase
- General Purpose I/O
 - 1 relay – 230Vac 5A
 - 1 digital Input
- -20...60°C working temperature range

Note: technical data subject to change, please refer to the latest specification version.





Project Engineering
CONTROLLI & SISTEMI

Project Engineering s.r.l.
Via Colle Ramole, 11 - 50023 Impruneta (FI) - Italy
Tel: +39 0552020179 - Fax: +39 0552022474
P. IVA IT 04092320482 - REA FI 414505 - Cap.soc. 56.000,00 € i.v.

www.proeng.it - info@proeng.it