Product Information Bulletin

PIB: PV2023-408
Date: 23 February 2023

Products affected:	Subject:
PVE series 6 for PVG16	PVE series 6 for PVG16 conversion to PVE series 7 platform

Component	Phase 1: PVEO, PVEA and PVEA-F Phase 2: PVEO-CI and PVEA-CI ISObus Phase 3: PVEO-CI and PVEA-CI CANopen
Modified	Phased out due to obsolescence of main component and converted to new PVG16 actuators in the PVE series 7 platform.
Date of Introduction	Phase 1: March 2023 Phase 2: 2nd half of 2023 Phase 3: End 2023/beginning 2024
Customer Action	• Evaluate and take necessary actions regarding removal of output pin spool position feedback and fault message output voltage change • Update required literature, ordering systems, BOMs, etc. • Plan with one week of stop for orders and shipment according to below plan • Prepare phaseout of PVEA-F and substitute with PVG 32

We are facing an obsolescence to the microcontroller used across PVE series 6 forcing us to convert to PVE series 7 platform. This change affects both Function and Fit.

Reason for change

As a result of component scarcity that has been characterizing the electronic products throughout the market last year we are facing an obsolescence of the microcontroller for our PVE series 6 family. We have searched the market for a suitable replacement product or any excess stock. Unfortunately, we have not been able to find an alternative and the last of the available components are already in our possession.

Therefore, we need to convert PVE series 6 to the latest electronic familiy we have – the PVE series 7. We will create new code numbers that will be replacing the current variants (see table below):

Conversion code numbers

Actuator	PVE series 6 code number	PVE series 7 code number
PVEO 12V	11106793	11313916
PVEO 24V	11106794	11313926
PVEA	11103692	11313922
PVEA-F	11106795	No conversion – phaseout
PVEO-CI ISObus	11124002	To be defined
PVEA-CI ISObus	11121945	To be defined
PVEO-CI CANopen	11149443	To be defined
PVEA-CI CANopen	11149437	To be defined

Last time buy date for PVEA-F due to component shortage

Due to several component shortages for amongst other the microcontroller combined with low annual sales demand for the PVEA-F we are forced to obsolete this variant since we do not have the possibility to do this conversion. Therefore the last time buy date for the PVEA-F will be 1 October 2023.

Change to error pin (functional change on analog actuators)
As a result of going to the series 7 platform we will change behaviour of the error output pin (PVEA pin 2) on the analog PVEA. On the current PVE series 6 this is an analog proportional current signal ranging from 0-5VDC. For the new actuators this will change to a digital output ranging from 0 to supply voltage known from all other analog actuators in our portfolio. The pin configuration remains the same.

This means:

- From PROP out to DIG out
- From maximum 5VDC to supply voltage (max 32VDC)
- From spool position indicated with voltage range to error indication only

As seen in the comparison below the following changes are to the signals on the pins for the PVEO and PVEA:

Was

PVEO and PVEA

PVE Type	Connector	Pin 1	Pin 2	Pin 3	Pin 4
PVEO	1 x 4 DEUTSCH	NC2	Vneg	Vneg	NC4
PVEA	1 x 4 DEUTSCH	VI	SP	Vneg	Vbat

Will be

PVEO

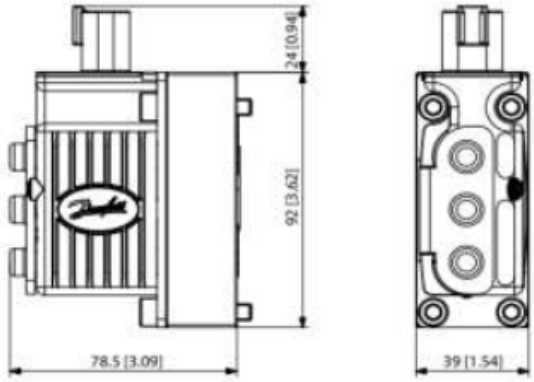
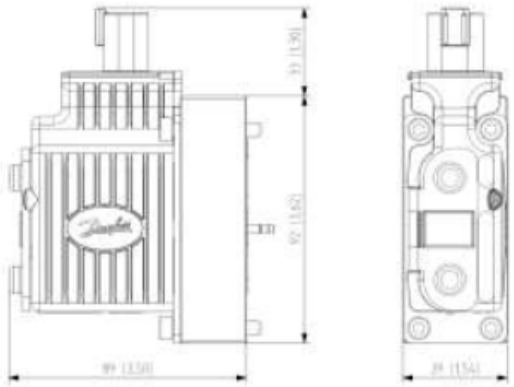
Pinout	Pin 1	Pin 2	Pin 3	Pin 4
1x4 DEUTSCH	U_{DC_A}	GND	GND	U_{DC_B}

PVEA

Pinout	Pin 1	Pin 2	Pin 3	Pin 4
1x4 DEUTSCH	U_S	Error	GND	U_{DC}

Change of size (fit change)
Although similar looking from outside there is a slight size difference between a PVE series 6 actuator and the equivalent PVE series 7 actuator.

As seen in the below drawing the PVE series 7 has marginally different dimensions than its predecessor.

Was	Will be
 Weight: 0.7 kg [1.54 lb]	

Conversion process and timeline
We will be converting specifications across the year 2023 according to below schedule.

When converting the analog actuators PVEO and PVEA, we will update and keep the valve stack code number. To ensure traceability of conversion date and ensure no mix of series on valves we will stop incoming orders and valve stack assembly, thereby also shipment, for one week.

For the CANbus actuators, -CI variants, more information will follow when we can confirm conversion date.

PVE type	Conversion date
PVEO, PVEA and	March 2023
PVEO-CI and PVEA-CI ISObus	Expected 2nd half 2023
PVEO-CI and PVEA-CI CANopen	Expected Q4 2023/Q1 2024

PVEA-F	Last time buy date 1st of October 2023

Please contact your local Danfoss Power Solution representative for questions regarding this information.

All Failure Mode Effects Analysis (FMEA's) and Control Plans affected by this change have been updated. Dimensional (ISIR), Capability (as required), and Measurement studies have been completed with prototypes and will have been verified with production tooling & processes before executing the change.

Copies of the quality documentation supporting this change are available for review at Danfoss Power Solutions.

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