



*PCM-KD
with one motor drive
and user interface*



*PCM-MD
with one motor drive*

Description

With the ProRate PLUS control system each feeder has its own PCM control module, installed directly at the feeder. In a line setting, up to eight feeders can be controlled from one PCM-KD. Connection between feeders and operator interface is via an industrial network. All setup, diagnostics and operator interface functions are controlled via the PCM-KD interface. With its tight integration into the feeder, the PCM can be pre-wired and pre-tested in the manufacturing plant.

Two models are available:

- The **PCM-KD** features an operator interface with keypad and LCD display in addition to a motor drive for one feeder. The control and motor drive module are combined into one component and are integrated directly into the feeder. The PCM-KD also features simple line control functionality: up to eight feeders can be controlled from one PCM-KD.
- The **PCM-MD** is a single feeder motor drive unit with no operator interface. The PCM-MD must be connected to a PCM-KD in order to control the feeder.

Configuration note: A single feeder must have a PCM-KD for feeder control functions. In a group or line setting with up to eight feeders one feeder in the group must be equipped with a PCM-KD, the rest just need the PCM-MD motor drive unit.

The Coperion K-Tron PCM motor drive board uses advanced motor control algorithms. Integrated motor torque measurement improves reliability and enhances diagnostics.

Connectivity

The PCM-KD has two built-in Ethernet RJ45 jacks. Using a web browser, these Ethernet channels provide access to a fully functional user interface, in the operator's selected language, as well as access to security setup files.

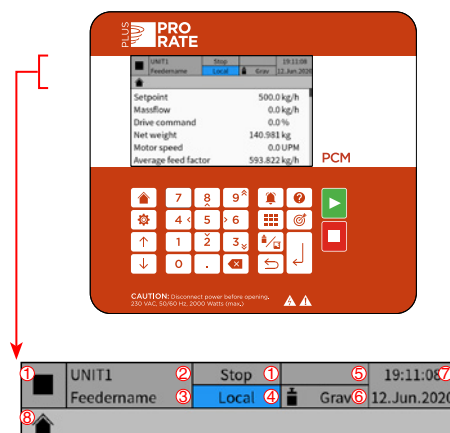
Connection to the plant's own host system can take place directly from a PCM-KD. Protocols available for the PCM-KD include: Ethernet/IP or Profinet I/O (see specification sheet P020302).

PCM-KD Operation

Function keys are marked with easily recognized symbols. From the Home Page, the operator can view the feeder's operational status and process parameters. Pressing the arrow keys scrolls up or down one line.

Symbol Keys

	Home		Up
	Settings		Down
	Alarm view / acknowledge		Previous feeder
	Line overview (all feeders)		Next feeder
	GRAV/VOL operation shift		Enter
	Back		Run
	Help		Stop
	Enter setpoint		

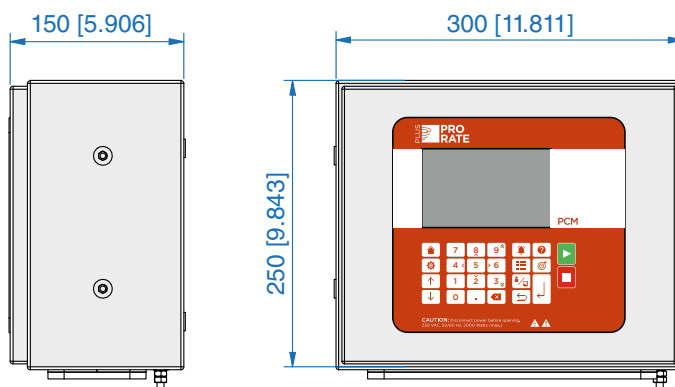


1. Operation symbol / status (Run, Stop, Wait, etc)
2. Currently selected feeder
3. Feeder name
4. Input mode (Local, Line, Regrind, Make-Up)
5. Event information / feeder status (Pert, Refill, Load, etc)
6. Operation mode (Grav, Vol)
7. Time & date
8. Page symbol (and name)

Technical Specifications

Power supply	
Supply Voltage:	230 VAC, 50-60 Hz (<i>single phase or US split phase</i>)
Max. power consumption:	600 W
Inputs/Outputs	
Output power:	500 W
Digital Outputs:	2 x Relays (ProFlow/Run, Refill)
Digital Inputs:	Hard interlock, drive enable input
Digital Outputs (KD only):	4 open collectors (Run, Start okay, Hard alarm, Soft alarm)
Digital Inputs (KD only):	4 x 5 V CMOS (Start/Stop, ACK Alarms, CLR Alarms, Enable/Disable)
Analog Output (KD only):	0-20 mA (shunt $\leq 500 \Omega$, Max 10 VDC)
Analog Input (KD only):	0-20 mA, 4-20 mA, 0-5 V or 0-10 V
Frequency Input (KD only):	0-20 kHz (Max 12 VDC)
Electrical standards	
Electromagnetic emissions:	EN 61000-6-4
Electromagnetic immunity:	EN 61000-6-2
Electrical safety:	EN 61010-1, UL 61010-1
Conformity	
	CE, NRTL listed (USA & Canada) IECEX
PCM-KD Display	5" color LCD
Languages	EN, DE, FR, ES, IT, DK, PL, TR, PT, CN, JP, RU, KR
Material	Stainless steel DIN 1.4301 [AISI 304]
Environmental conditions	
Ex classifications:	ATEX 3D, IECEX EPL Dc / NEC Class II Div 2, Gr. F&G / CCC Certificate (China)
Ambient temperature range:	0...50°C [32...122°F]
Storage temperature range:	-25...80°C [-13...176°F]
Max. humidity:	95% at 35°C [95°F] non-condensing
Protection:	IP65

Dimensions mm [in]



Available cable glands sizes: 8x M16 and 4x M20

Caution: these measurements are for general reference only. Please consult dimensional drawing for exact measurements