

AX-PCM120i

120VA Phase-Cut Module (isolated)

AXIO



Product overview

The Axio AX-PCM120i converts a single 0-10Vdc control input signal to a 0-20V, 50Hz phase-cut output, at up to 120VA. The control circuit of the module is powered from 24Vac or 24Vdc (with a common connection to the input signal). A separate input connection is provided for the 24Vac phase-cut load supply. The AX-PCM120i features full opto-isolation of the control signal from the output circuit, to ensure that no grounding conflicts can occur.

Features

- 120VA 0-20V Phase-Cut Output
- 0-10V control signal input
- Fully opto-isolated
- DIN rail carrier as standard (TS35 DIN rail)
- High quality rising clamp terminals
- Integral heatsink

Product specifications

Control Supply Input	24Vac/dc ($\pm 15\%$), at 25mA maximum
Control Input Supply	0-10Vdc (47k Ω load impedance)
Phase-Cut Load Supply Input	24Vac, 50Hz rated to drive the load (120VA maximum)
Phase-Cut Load Signal	0-20V full wave rectified 50Hz phase-cut at 120VA maximum
LED Indicator	Provides indication of unit operation (see section on page 2)
Terminals	Rising clamp for 0.5-2.5mm ² cable
Dimensions	125(W) x 85(H) x 78(D)mm
Weight	300gms
Ambient Temperature Range	0 to 40°C
Country of Origin	United Kingdom

Order codes

AX-PCM120i 120VA Phase-Cut Module (isolated)

Order Online at:

www.annicom.com

Email orders and enquiries to:

Sales@annicom.com

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Led Indication

Activity LED

Brightness proportional to control input signal
Flashes when control signal input at 0V
Blinks when output phase is lost

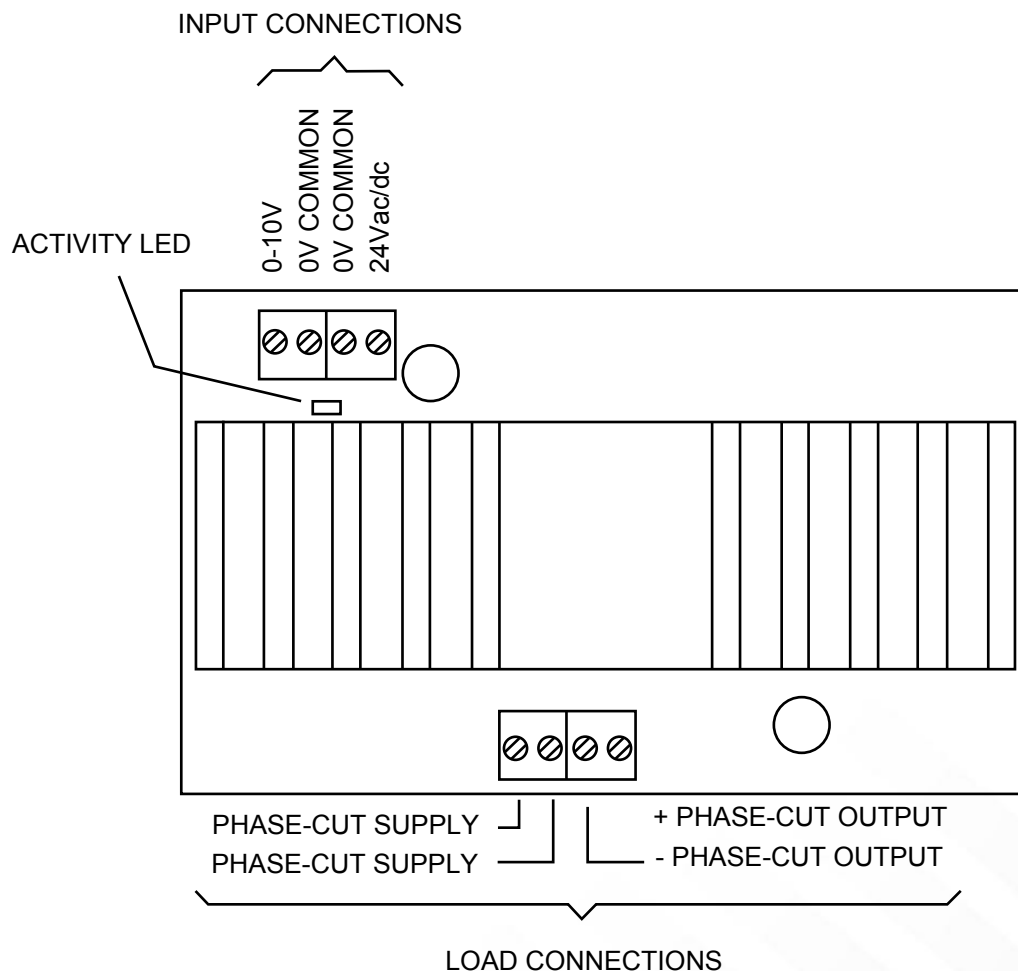
Installation

The AX-PCM120i should be installed by suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. Field wiring should be installed to satisfy the requirements set out by the manufacturer of the equipment that the module is being connected to.

There is a heatsink fitted to this module, which can get hot in operation. The AX-PCM120i must be mounted so that adequate cooling is provided by free air circulation.

The 24Vac phase-cut load supply must be rated to supply the full phase-cut output load.

Description and connections



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The 'input connections' on the AX-PCM120i are fully opto-isolated from the 'load connections'. So, if one of the phase-cut outputs is earthed, then the OV on the 'input connections' can also be earthed without causing any conflicts (provided the phase-cut supply is floating). (Refer to the wiring detail shown in example 1).

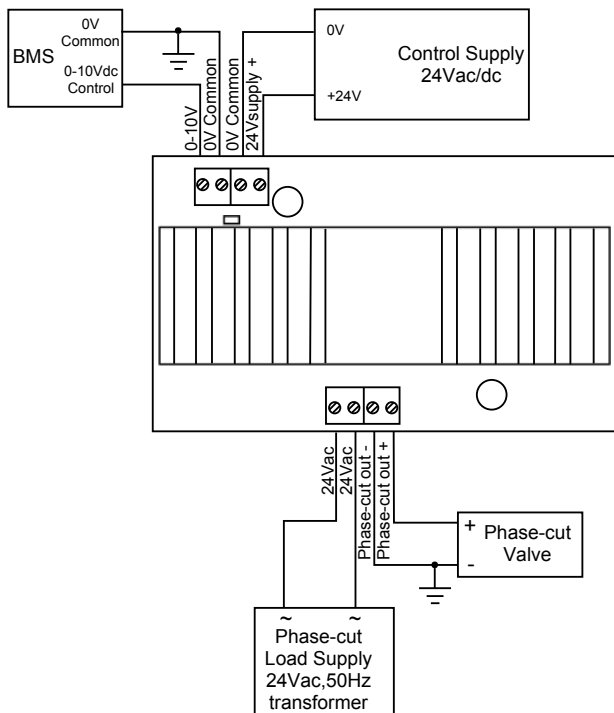
All of the 'load connections' must be isolated from each other, otherwise damage to the unit will occur. For example, if the '-phase-cut output, is earthed, then the two 'phase-cut supply' connections must be floating.

If required, the 'Input Control supply' can be commoned to the 'phase-cut supply'. However, this negates the isolation of the connections, and only one point in the system can be earthed (refer to the wiring detail shown in example 2).

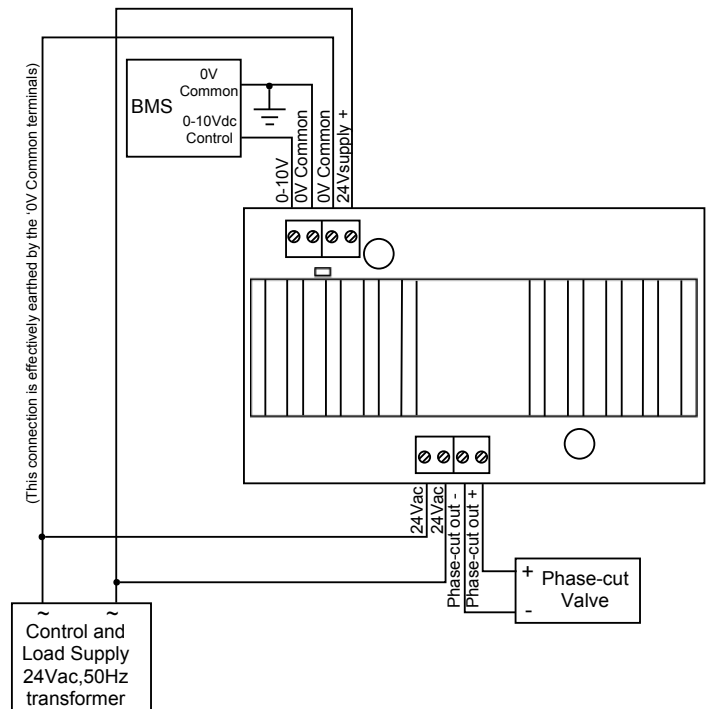
The module is not protected against short circuits on the output. Care must be taken during wiring, and suitable external fusing should be fitted. All connections should be made with the power disconnected.

3-Wire valves (e.g. Belimo types with their own 24V supply connection) are not recommended for the use with this module. Please use the AX-PCM2-30i module for these applications, the data sheet for which shows the recommended connections details.

Example 1 - Earthed BMS Connection and earthed load (control supply and load supply must be isolated from each other)



Example 2 - Common Supplies, with earthed BMS connection (Note load must not be earthed)



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