

PHANTOM

12



THE PHANTOM RANGE!

A new breed of high tech ultra responsive DC convertors

GENERAL DESCRIPTION

The PHANTOM 12 is a three phase 4 quadrant fully regenerative convertor designed to provide high performance control of DC motors up to 250 kW.

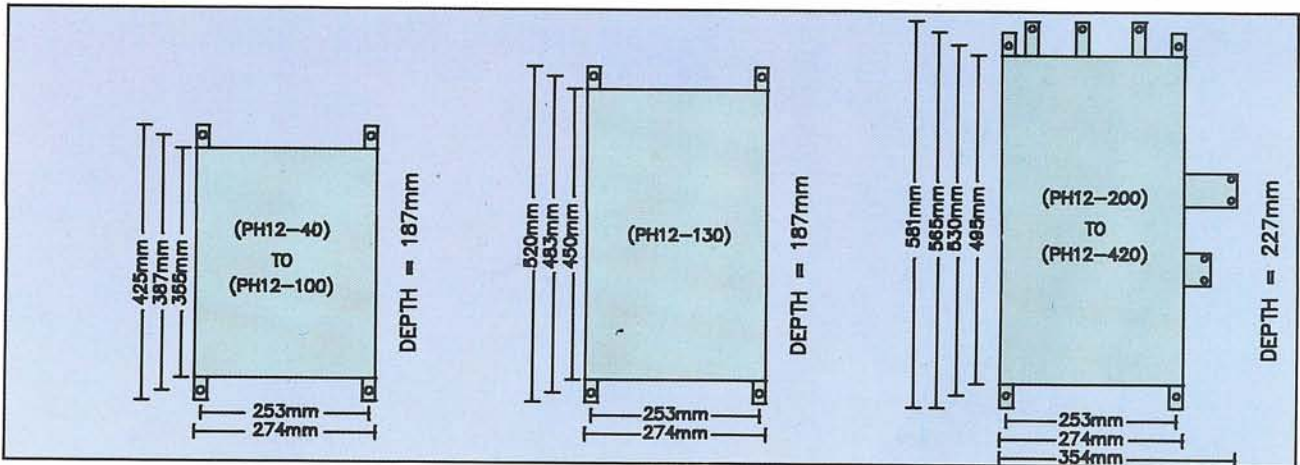
The PHANTOM 12 is characterised by its ultra dynamic response, system orientation, diagnostic features, ease of maintenance, compact size and advanced technology.

MAJOR FEATURES

- Plug in program parameter preset module
- Adaptive current control
- 3 term PID speed control
- Phase advance and retard
- Link selection of armature or tacho feedback
- Diagnostic test socket for 22 test points
- LED indication of 6 normal conditions
- LED indication of 8 fault conditions
- Comprehensive remote signaling
- DIP switch programmable stop mode

CON-TECH

PHYSICAL DIMENSIONS



CONTROL AND DESIGN PHILOSOPHY

- Adaptive current control** enhances low speed response
- Phase advance retard** speeds up bridge change over
- 3 term PID control of speed loop** enhances load change response
- Ultra tight bridge interlocking** speeds up bridge change over
- Adaptive current boost** prevents repetitive boost demand
- Plug in parameter preset module** obviates need to re-commission
- Diagnostic test socket** trend and digital information of 22 test points
- Plug on user control connections** rapid inter change of control card
- Normalised reference and feedback polarity** simplifies multi drive system design
- External independent voltage control** of forward and reverse current limit
- Three summed speed reference inputs** one via acceleration and deceleration ramp:
- DIP switch programmable stop sequence** free-wheel, ramp down or regenerate
- Fully isolated armature and current feedback**
- Buffered output** of acceleration and deceleration ramps
- Buffered output** for speed and current indication
- LED indication of 6 normal conditions**
- LED indication of 8 fault conditions**
- Ultra fast instantaneous over current trip**

PROTECTION

- Instantaneous overcurrent trip** with LED indication
- Timed stall trip** with LED indication and open collector output
- Inverse time current boost limit**
- Stack over temperature** with LED indication
- Phase rotation/loss** with LED indication
- Phase lock** with LED indication
- Field loss** with DIP switch bypass and LED indication
- Tacho fail** with DIP switch bypass and LED indication
- External fault** with DIP switch bypass and LED indication
- Half cycle loss** shuts down drive
- Drive fault** with potential free relay contact

DRIVE STATUS INDICATION

- Drive started** with potential free relay contact
- Drive enabled**
- Drive at zero speed** with open collector output
- Drive at current limit** with open collector output
- Bridge 1 selected**
- Bridge 2 selected**

SELECTION CHART

MODEL NO.	380V SUPPLY		525V SUPPLY	
	kW	CURRENT	kW	CURRENT
PH12-40	14	40	19	40
PH12-55	20	55	26	55
PH12-70	25	70	34	70
PH12-85	30	85	40	85
PH12-100	36	100	48	100
PH12-130	46	130	63	130
PH12-200	72	200	97	200
PH12-250	90	250	120	250
PH12-285	102	285	138	285
PH12-390	140	390	190	390
PH12-420	150	420	204	420

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