



Refrigeration Control

- Case & Coldroom Controllers
- Pack Controllers
- Temperature Monitoring
- Front-End Systems
- Refrigerant Gas Leak Detection Systems
- Frequency Converters
- Refrigerant Valves

The manufacture and supply activities formerly carried out by Honeywell Refrigeration & Control are now available from:

RCS Energy Management
RMS House
Kennet Side
Newbury
Berkshire
RG14 5PX

Phone: 01635 231 600

Fax: 01635 231 699

Web: www.elmcontrols.co.uk

**E-Mail: sales@rcsenergymanagement.co.uk
service@rcsenergymanagement.co.uk**

Please note that the prices given are subject to discount and there are different discount levels on different product lines. Please call 01635 231600 for details.

Prices valid from 01/07/09.

CONTENTS

CONTACT DETAILS.....	2
CONTENTS.....	3
CASE & COLDROOM CONTROLLERS.....	4
Tuscan Plus.....	4
Tuscan 5.....	5
Case / Coldroom Application Glossary (*1 to *6).....	6
Coldroom Panel.....	7
CASE & COLDROOM ACCESSORIES.....	8
Temperature Probes (NTC 2k, 3k, 5k & PT1000).....	8
Temperature Probes (Detachable).....	8
Thermally Damped Temperature Probes	9
Set Up Units (SUU)	9
Set Up Unit Display Cable Extension Leads	9
Cables & Sundry Accessories	10
Flush Mount Displays	10
Display Cables	10
PACK CONTROLLERS.....	11
Minipack 100 / 200.....	11
Minipack Controller Accessories	12
Step Controller & Relay Board	12
Oil Monitor.....	13
TEMPERATURE MONITORING.....	14
Thermlog.....	14
Thermlog Accessories.....	15
TEMPERATURE, PLANT & LIGHTING CONTROLLERS WITH ACCESSORIES.....	16
Tuscan 5	16
FRONT-END SYSTEMS.....	17
Supervisor	17
Supervisor Accessories.....	17
PCVisor	18
PCVisor Accessories.....	18
Desktop PC with SynOpsys / InView2.....	18
SynOpsys.....	19
Central Station	19
InView2	19
REFRIGERANT GAS LEAK DETECTION SYSTEMS.....	20
HGM300 Series – Multi Zone System.....	20
HGM300 Series Accessories	20
FREQUENCY CONVERTERS / INVERTERS.....	21
NXS Series	21
NXL Series	23
APPENDIX.....	25
Stock Availability Codes (*7).....	25

Trademark Information

Windows 2000 and Windows XP is a trademark of Microsoft Corporation and registered in the United States and other countries.

Echelon, LON, LonMark, LonWorks, LonBuilder, NodeBuilder, LonManager, LonTalk, LonUsers, LonPoint, Neuron, 3120, 3150, the Echelon logo, the LONMARK logo, and the LonUsers logo are trademarks of Echelon Corporation registered in the United States and other countries. LonLink, LonResponse, LonSupport, and LonMaker are trademarks of Echelon Corporation.

™ Honeywell and Elm are Trademarks of Honeywell International Inc.

CASE & COLDROOM CONTROLLERS

Tuscan Plus



Honeywell's Tuscan Plus enhanced display case and coldroom application package combines the Tuscan universal refrigeration controller, the display and up to 5 temperature probes. Tuscan Plus has been developed as an all-in-one control package to monitor and control a wide range of Mechanical Valve (TEV) or Electronic Valve (EEV) cases and coldrooms.

Description	Part No.	TEV / EEV		Dyadic *1	Generic-Case *2	2/3 Section-Case *3	Glass Door-Case *4	Coldroom *5	3 Range *6	Probes		Pack Weight [kg]	Stock Code*7	£ / Unit
										NTC2k	PT1000			
Tuscan controller, 3 x NTC 2k probes, display and display cable.	199000	T	•	•	•	•	•	•	•	3		2	0	340.00
Tuscan controller, 3 x PT1000 probes, display and display cable.	199001	T	•	•	•	•	•	•	•		3	2	0	340.00
Tuscan controller, 5 x NTC 2k probes, display and display cable.	199002	E		•			•	•	•	5		2	0	340.00
Tuscan controller, 5 x PT1000 probes, display and display cable.	199003	E		•			•	•	•		5	2	0	340.00
Tuscan controller, 3 x NTC 2k probes, IR display and display cable.	199004	T	•	•	•	•	•	•	•	3		2	0	350.00
Tuscan controller, 3 x PT1000 probes, IR display and display cable.	199005	T	•	•	•	•	•	•	•		3	2	0	350.00
Tuscan controller, 5 x NTC 2k probes, IR display and display cable.	199006	E		•			•	•	•	5		2	0	370.00
Tuscan controller, 5 x PT1000 probes, IR display and display cable.	199007	E		•			•	•	•		5	2	0	370.00

*1...*6: Please refer to Case / Coldroom Application Glossary on page 6.

*7: Please refer to Stock Availability Codes on page 25.

Tuscan 5



The Tuscan 5 Universal Controller monitors and controls a wide range of high or low temperature cases and coldrooms all in one package. These can operate independently or as part of a network-control system. There are several controller series, each with their own different functions depending on their field of application.

Product	Part Number	Specification											Pack Weight [kg]	Stock Code*7	£ / Unit	
		Valve		Dyadic *1	Generic-Case *2	2/3 Section-Case *3	Glass Door-Case *4	Coldroom *5	3 Range *6	On board relay	Probes					
		Mechanical expansion	Electronic expansion								NIC-2000 Ohm	NIC-5000 Ohm				PT-1000 Ohm
Universal Case & Coldroom Controller	190797-YAD	●		●	●	●		●	●	●	●			1.5	0	275.00
Universal Case & Coldroom Controller	190797-YBJ	●		●	●	●	●	●	●	●	●			1.5	0	275.00
Universal Case & Coldroom Controller	190797-YBX	●		●	●		●	●	●	●	●			1.5	0	275.00
Universal Case & Coldroom Controller	190797-YCA	●			●		●	●		●	●			1.5	0	275.00
3 Range Case Controller	190797-YDH	●							●	●	●			1.5	0	275.00
Universal Case & Coldroom Controller	190797-YDL	●		●	●		●	●	●	●	●	●		1.5	0	275.00
Twin coil-Case Controller	190797-YCG	●							●	●	●			1.5	0	320.00
Twin coil-Case Controller	190797-YAU	●								●	●			1.5	0	275.00
Universal Coldroom Controller	190797-YCV	●						●		●	●			1.5	0	275.00
3 Range Case Controller	190797-YDM	●							●	●	●	●		1.5	0	275.00
Generic Case Controller	190797-YBU	●			●					●	●			1.5	0	275.00
Universal Case & Coldroom Controller	190797-YEF	●			●					●	●			1.5	0	275.00
Universal Case & Coldroom Controller	191125-YBJ	●		●	●	●	●	●	●	●		●		1.5	0	352.00

*1...*6: Please refer to Case / Coldroom Application Glossary on page 6.

*7: Please refer to Stock Availability Codes on page 25.

Product	Part Number	Specification											Pack Weight [kg]	Stock Code*7	£ / Unit	
		Valve		Dyadic *1	Generic-Case *2	2/3 Section-Case *3	Glass Door-Case *4	Coldroom *5	3 Range *6	On board relay	Probes					
		Mechanical expansion	Electronic expansion								NTC-2000 Ohm	NTC-5000 Ohm				PT-1000 Ohm
Universal Case & Coldroom Controller	190887-EEC		●		●		●	●		●	●			1.5	0	335.00
Universal Case & Coldroom Controller	190887-EEV		●		●		●	●		●	●			1.5	0	335.00
Universal Case & Coldroom Controller	190887-EET		●		●		●	●		●	●			1.5	0	335.00
Universal Case & Coldroom Controller	190887-EEK		●		●		●	●		●	●			1.5	0	335.00
Universal Case & Coldroom Controller	191126-EEV		●		●		●	●		●		●		1.5	0	375.00
3 Range Case Controller	191307-EEG		●					●		●	●			1.5	0	360.00
2/3 Section Case Controller	191307-EEF		●			●				●	●			1.5	0	360.00

*7: Please refer to Stock Availability Codes on page 25.

Case / Coldroom Application Glossary (*1 to *6)

*1 - Dyadic-Case

To control a mobile case with one or two compressors, defrost heater, fan and lights, nightblind control, 3 temperature range.

*2 - Generic-Case

To control a standard piped case with single evaporator, single liquid line valve defrost, fans, lights / blinds and fixed temperature range.

*3 - 2/3 Section

To control a 2 or 3 piped case section with an evaporator in each section but a common liquid line valve.

*4 - Glass Door

To control a standard piped full or half glass door case with single evaporator, single liquid line valve, fans and trim heater.

*5 - Coldroom

To control a coldroom with single evaporator single liquid line valve but with door switch input and fan control during defrost.

*6 - 3 Range

To control a standard piped case with option of 3 fixed temperature ranges, single evaporator and single liquid valve.




Coldroom Panel



The Honeywell Panel is a compact Coldroom Control System based on the Icon 363CS controller. The unit consists of a 4 digit temperature display mounted on the front of a robust, wall mountable IP50 metal enclosure. The panel covers all main coldroom control functions including:

- Liquid Line Solenoid Valve
- Defrost & Pan Heaters (up to 2)
- Evaporator Fans (up to 3)
- Drain Heater
- Lighting
- Alarms







The operating parameters are easy to set using the buttons on the front of the display. The control system can be "locked out" for security purposes and also features a number of fast access buttons to cover the most commonly used functions.

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Coldroom Panel	Coldroom panel controller	591007-I	12	2	670.00
	Temperature Probe	2k NTC temperature probe with 7m cable.	TP002K	0.2	0	11.00
	Temperature Probe (red)	Temperature sensor PTC 1K Ohms (PT1000) (-50 to +90°C) Length :23' / 7 m	TPPT1K	0.2	0	19.30




*7: Please refer to Stock Availability Codes on page 25.

CASE & COLDROOM ACCESSORIES

Temperature Probes (NTC 2k, 3k, 5k & PT1000)





	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Temperature Probe (black)	Temperature Sensor 2k Ohm NTC (-50 to +90°C) Length :23' / 7 m	TP002K	0.2	0	11.00
	Temperature Probe (orange)	Temperature Sensor 3k Ohm NTC (-50 to +90°C) Length :23' / 7 m	TP003K	0.2	0	20.50
	Temperature Probe (green)	Temperature Sensor 5k Ohm NTC (-50 to +90°C) Length :23' / 7 m	TP005K	0.2	0	11.00
	Temperature Probe (brown)	Temperature Sensor 20k Ohm NTC (-50 to +90°C) Length :23' / 7 m	TP020K	0.3	0	11.00
	Temperature Probe (red)	Temperature sensor PTC 1K Ohms (PT1000) (-50 to +90°C) Length :23' / 7 m	TPPT1K	0.2	0	19.30
	Probe Clips	To fix sensor on pipe for use with TP series Probes (size:3/8"; 1/2"; 5/8"; 3/4")	SF0120	0.3	0	4.00

Temperature Probes (Detachable)


	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Temperature Probe	Detachable Head Thermistor Sensor with 5kOhm Bead (-50 to +90°C)	SF0501	0.1	2	20.00
	Probe-Cable	Cable for detachable probe, 5m	SF0500	0.25	2	20.00
	Probe-Cable	Cable for detachable probe, 10 m	SF0502	0.4	2	30.00

*7: Please refer to Stock Availability Codes on page 25




Thermally Damped Temperature Probes

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Thermally Damped Probe	Temp. Sensor 2kOhm NTC thermally damped sensor with magnetic base incl. Plug Length: 1.45 m	790844	0.3	0	58.00
	Thermally Damped Probe	Temp. Sensor PT1000 thermally damped sensor with magnetic base incl. Plug Length: 1.45 m	795712	0.3	0	58.00
	Sensor extension cable	6.5 m sensor cable for 790844 slugged sensor	790844-A	0.1	0	22.00
	Bracket mounting	Slugged sensor fixing bracket for non magnetic surface	191128	0.2	0	4.50

Set Up Units (SUU)


	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Set-up-unit	Set-up-unit with cable	191795-DAD	0.6	0	249.00

Set Up Unit Display Cable Extension Leads



	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Screened Display cable	Display cable for use in areas with excessive electrical noise. Length: 5 m	790846	0.25	0	9.00
	Display cable Extension Lead	For panel Mount SUU Extension Lead Length: 0.9m	790536-A	0.2	0	24.00
	Display cable Extension Lead	For panel Mount SUU Extension Lead Length: 3m	790536-B	0.2	0	24.00

*7: Please refer to Stock Availability Codes on page 25


Cables & Sundry Accessories

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Network Cable	Belden 8723 Genus Network Cable. 2 screened twisted pairs. Length:100 m	WA0001	3.0	0	104.00

Flush Mount Displays

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Display	Flush Mount, with key pad & Set-Up Socket	190920	0.15	0	86.00
	Display	Flush mount LED display, with key pad	191900	0.15	0	68.00

Display Cables

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Display cable	Standard cable to connect display to Tuscan 5; Length: 5 m	790385	0.12	0	5.20

*7: Please refer to Stock Availability Codes on page 25

PACK CONTROLLERS

Minipack 100 / 200



The Honeywell Minipack 100 & 200 controllers have been developed to monitor and control compressors and / or condenser fans in refrigeration applications. Their primary function is to automatically control suction and discharge pressure, which gives added benefit of saving energy.

The Minipack 200 controller can monitor and control a set of eighteen stages with the option of:






- Up to 18 compressors (8 for Minipack 100).
- Up to 18 condenser fans (8 for Minipack 100).
- Mix of both compressor and condenser fans.
- Mix of low temperature and high temperature pack controllers.
- Variable speed compressor control.
- Variable speed fan control.

The Minipack series provide a means of raising and lowering the target suction pressure of the pack controller to satisfy the duty demanded by a set of monitored cases on that pack. As a result energy savings are achieved.

Product	Part-No.	Specification						Pack Weight [kg]	Stock Code*8	£ / Unit
		controller Single Stage pack condenser	Multi Stage pack condenser controller	Floating head pressure	HT / LT Pack	Number of assignable Stages	Bar / Psi -Display			
Minipack 100	190977-ABA	●			●	8	B	1.4	0	650.00
Minipack 100	190977-ADP		●	●		8	B	1.4	0	650.00
Minipack 100	190977-ABJ		●	●		8	P	1.4	0	650.00
Minipack 200	191002-ABA	●			●	18	B	2.0	0	996.00
Minipack 200	191002-ABJ		●	●		18	P	2.0	0	996.00
Minipack 200	191002-ADP		●	●		18	B	2.0	0	996.00

*7: Please refer to Stock Availability Codes on page 25.

Minipack Controller Accessories


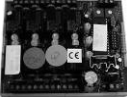

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Pressure Transducer for MP 100 / 200	Suction pressure (1/4" NPT Thread female) (-1....+14 bar /4-20mA)	SF0300	0.2	0	250.00
	Pressure Transducer for MP 100 / 200	Discharge pressure (1/4" NPT Thread female) (-1....+34 bar /4-20mA)	SF0301	0.2	0	250.00
	Display	Flush mount LED display with key pad	191900	0.15	0	68.00
	Display cable	Standard cable to connect display to Minipack; Length: 5 m	790385	0.12	0	5.20
	Screened Display cable	Display cable for use in areas with excessive electrical noise. Length:5m	790846	0.25	0	9.00

Step Controller & Relay Board

The Honeywell Step Controllers enable operation of multi-compressor refrigeration packs or condenser fans using a sequential or cyclic switching sequence.

Stage Up or Stage Down is determined via a dead band pressure switch, across a set of eight volts-free normally open contacts. The contacts provide simple step control of up to eight stages of compressor / condenser fans, with an interval maximum of six-minutes between successive starts of any switching stages.

Six bit-switches located on the board ensure easy configuration for any application. On and Off delays for compressors / condenser fans are fully adjustable using two potentiometers. On-board LED provides illuminated status of individual relay outputs, as well as illuminated indicating for Power, Up and Down.

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
	Combined Step Controller	240 Vac Power supply; 240 V Switching: Compressors; Fans	191180	1.5	2	175.00
	Combined Step Controller	24 Vac Power supply; 24 V Switching: Compressors; Fans	191238	1.5	2	178.00
	Relay Board	24 Vac Relay Board for auxiliary outputs. (24V Supply; 24V Switching)	191243	0.25	2	154.00

*7: Please refer to Stock Availability Codes on page 25.

Oil Monitor



The Oil Level Monitor has been developed to monitor plant compressor oil level.

If a compressor is running and the optic senses that oil level is low, after a 'hold off' period of 5 seconds, the oil injection output energises to pulse charge the system with oil, ...5 seconds ON, ...15 seconds OFF, until the level goes high again.

If the condition lasts for more than 105 seconds, the oil injection and oil healthy outputs de-energise and the compressor is stopped through its normal safety chain. Pressing the Oil Reset button returns the compressor to a healthy state.

Six LEDs indicate status:

- Oil-level Healthy (Optic) (green)
- Low-Pressure trip (red)
- Compressor Run (green)
- High-Pressure trip (red)
- Oil Trip (red)
- Discharge Temp. trip (red)

Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£ / Unit
Oil Monitor	Plant compressor oil level monitor with 6 status windows	191356-A	0.3	2	110.00
Oil Monitor	Plant compressor oil level monitor with 6 status windows (without connector)	191356-D	0.3	2	100.00

*7: Please refer to Stock Availability Codes on page 25.

TEMPERATURE MONITORING

Thermlog










Thermlog has been specifically designed for smaller supermarkets and retail applications providing accurate and up-to-date temperature monitoring and alarm handling.

With a choice of 8 or 32 digital or analogue inputs, printer and optional Genus® network protocol, Thermlog can be tailored to your specific requirements with the added benefit of complying with 'due diligence' health and safety regulations.

Product	Part-No.	Specification					Pack Weight [kg]	Stock Code*7	£/ Unit
		Network		Printer	Modem	Channels			
		Genus®	Standalone						
Thermlog	191316-NP8		●			8	6.5	1	1250.00
Thermlog	191316-G	●		●		32	6.5	1	1850.00
Thermlog	191316-GNP	●				32	6.5	1	1709.00
Thermlog	191316-GMP	●		●	●	32	6.5	1	2175.00
Thermlog	191316		●	●		32	6.5	1	1705.00
Thermlog	191316-MP		●	●	●	32	6.5	1	2026.00
Thermlog	191316-NP		●			32	6.5	1	1667.00

*7: Please refer to Stock Availability Codes on page 25.

Thermlog Accessories





	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Thermlog Genus® Interface Card	Honeywell Genus® Network card for use with Thermlog	191157-T	1	0	100.00
	Probe	Temperature Sensor 2kOhm NTC (-50 to + 90°C)	TP002K	0.2	0	11.00
	Slugged Probe	Temp. Sensor 2kOhm NTC thermally damped sensor with magnetic base (-50 to + 90°C)	790844	0.3	0	58.00
	Sensor extension	6.5 m sensor cable extension for 790844 slugged sensor	790844-A	0.1	0	22.00
	Bracket mounting	Slugged sensor fixing bracket for non magnetic surface	191128	0.2	0	4.50
	Printer Paper	Box of 20 rolls, for Panel mounted 'ASL' Printer as used on Thermlog and Supervisor Units	SY0228-B	2.0	0	57.00
	Printer ribbon	Cartridge (Supplied in packs of 5)	SY0259	0.3	0	102.50

*7: Please refer to Stock Availability Codes on page 25.

TEMPERATURE, PLANT & LIGHTING CONTROLLERS WITH ACCESSORIES

Tuscan 5

The TUSCAN 5 can be set to act as a general-purpose alarm monitor, a generator alarm monitor or a pack monitoring unit. The monitor can operate in "stand alone" mode or as part of a Genus® network.




	Product	Part-No.	Specification						Pack Weight [kg]	Stock Code *8	£ / Unit
			Inputs Temperature	Defrost Inputs	Timer Outputs	Alarm Inputs	Override Inputs	Light sensor			
	Temperature & defrost monitor	190797-YBB	4	4					1.5	0	275.00
	Temperature & defrost monitor	190797-YAW	8	1		1			1.5	0	275.00
	5 channel timer / lighting controller	190797-YCE			5		7	1	1.5	0	275.00
	Plant fault monitor	190797-YAV				8			1.5	0	275.00

*7: Please refer to Stock Availability Codes on page 25.




FRONT-END SYSTEMS

Supervisor

Supervisors are wall mounted units, capable of temperature monitoring up to 192 Genus controllers. Supervisors also provide system functions such as temperature logging, alarm logging, alarm inhibit and a service menu. Up to 100 channel defrost timers and up to 50 General Purpose timers can be set up to control case lights, site lights and other timed functions.

Product	Part-No.	Specification						Pack Weight [kg]	Stock Code*7	£/ Unit	
		Genus devices	Alarm buzzer	Energy Optimisation	Printer	Channel Defrost Timer	General Purpose- Timer				
	Supervisor 64	190974-UAB	64	●	●	●	50	32	15.0	1	2622.00
	Supervisor 128	191097-UAC	128	●	●	●	50	32	15.0	1	3382.00
	Supervisor 192	190707-UAA	192		●		100	50	26.0	1	3752.00

Supervisor Accessories

Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit	
	Modem Kit (Optional for all Supervisors)	Modem kit for use with Supervisor	191460	0.5	0	416.00
	Printer Paper	Box of 20 rolls; for Panel mounted 'ASL' Printer as used on Thermlog, Supervisor and Datac Units	SY0228-B	2.0	0	57.00
	Printer ribbon	Cartridge (Supplied in packs of 5)	SY0259	0.3	0	102.50

*7: Please refer to Stock Availability Codes on page 25.





The PCVisor with installed SynOpsys software functions as the heart of a fully networked refrigeration plant, HVAC and BMS system. It provides a fully integrated data monitoring system and displays the information in an easy to use menu driven graphical format. The PCVisor also provides pack controller optimisation to automatically regulate the target suction pressure of a pack compressor / pack, thereby saving energy.



The unit can be connected to a maximum of 192 controllers (6 networks x 32 devices) using Honeywell Genus® network protocols. The PCVisor permits 2-way communication, in that it can be used to retrieve and log real-time system data as well as providing the capability to remotely configure the network controller parameters. For more information on SynOpsys please refer to page 26.

Product	Part-No.	Specification									Pack Weight [kg]	Stock Code*7	£/ Unit
		Genus®-devices	Alarm buzzer	Energy Optimisation	Modem	Channel Defrost Timer	General Purpose Timer	Alarm Relays	Touch screen	Software			
PCVisor 192	191735-S	192	●	●	●	100	50	3	●	●	30.0	1	11556.00

PCVisor Accessories

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*8	£ / Unit
	Alarm Panel	Alarm repeater panel providing local audible (siren) and visible (blue flashing light) warning of an alarm condition, when connected to PCVisor.	SPD2864	10.0	2	360.00
	UPS	Uninterruptible Power Supply for use with PCVisor	190747	10.0	2	696.00

Desktop PC with SynOpsys / InView2

	Product	Description	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
	Desktop PC	Desktop PC with internal modem and flat 15" screen display with SynOpsys C+R software package installed	291500-S	25.0	1	4414.00
	Desktop PC	Desktop PC with internal modem and flat 15" screen display with InView2 software package installed	290675-MAL	25.0	1	3114.00

*7: Please refer to Stock Availability Codes on page 25.

SynOpsys

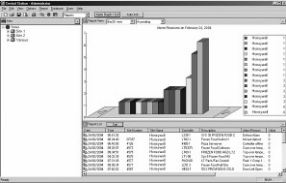


SynOpsys is a Windows based software package that provides a simple-to-use graphical interface to enable the status of refrigerated cases, plant and coldrooms to be monitored and data logged. The SynOpsys program gathers a wide variety of data and presents it instantaneously to the user in an easy to understand graphical format on either a desktop PC or the PCVisor. SynOpsys uses Internet Explorer as its display engine.

Product	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
SynOpsys Instore Software on a CD	SynOpsys C+R	0.4	0	1520.00


Central Station

Central Station is a Windows[®] based computer program, used to collect and monitor alarms signalled from Honeywell front-end networked systems in various sites, using modems connected over a public service telephone network or a TCP/IP network. The program can also be used 'offline', to allow users to review alarms and generate detailed reports.

Product	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
 Central Station PC Software on CD-ROM, 1 licensed installation. Compatible with Microsoft [®] Windows NT4, 2000 or XP.	291200	0.3	0	P.O.A.

InView2

InView2 is a software package for use with Thermlog and Supervisor systems, that provides remote or on site monitoring alarm handling and logging of Genus-network system parameters. InView2 also allows Genus-system parameter to be altered remotely or on site. InView2 can be used on a desktop PC, InTouch or PCVisor panel.





Product	Part-No	Pack Weight [kg]	Stock Code*7	£/ Unit
 InView2 PC Software Diskette, 1 licensed installation. Compatible with Microsoft [®] Windows 95, 98 & 2000	191200	0.3	0	P.O.A.

*7: Please refer to Stock Availability Codes on page 25.





REFRIGERANT GAS LEAK DETECTION SYSTEMS

HGM300 Series – Multi Zone System

The HGM300 Gas Leak Detection System is a multiple gas, multiple area infrared refrigerant gas monitoring system. It is capable of continuous low level sampling of CFC, HCFC and HFC refrigerant gases that can be selected from the library of commonly used refrigerants. Coverage is 4 sampling areas as standard. Additional areas in multiples of 4 can be monitored by adding the optional port expansion modules. Up to three modules can be added to the standard product for a total of 16 areas monitored.

	Product	Description	Part-No	Pack Weight[kg]	Stock Code*7	£/ Unit
	Refrigeration Gas Leak Detection System (HGM 300)	System for 4 Channels	YG3000	25.0	4	4370.00
	4 Channel Expansion Module	For YG3000 (4 Way) to convert unit above to 8,12 or 16 Channels	YG3001	2.0	4	630.00
	Genus Interface unit	In metal wall mount enclosure	YG3002	8.0	4	1020.00
	Remote Data Monitor (RDM 800)	To configure YG3000 when not using Genus interface	YG3800	5.0	4	1996.00

HGM300 Series Accessories

	Product	Description	Part-No	Pack Weight[kg]	Stock Code*7	£/ Unit
	Straight Brass Coupling	For extending sample Tubing	SY0309	0.2	0	10.00
	T-Coupling	For splitting sampling tube.	SY0314	0.35	0	10.00
	Air intake sample filter	Filter assembly for end of intake tubing	YG1004	0.3	0	30.00
	Flame Retardant Intake sample Tubing	¼" O.D.x250ft long Supplied in the following colours:	-	-	-	-
		Black	WP0008	2.0	0	52.00
		White	WP0009	2.0	0	52.00
		Red	WP0010	2.0	0	52.00
		Orange	WP0011	2.0	0	52.00
		Yellow	WP0012	2.0	0	52.00
		Green	WP0013	2.0	0	52.00
		Blue	WP0014	2.0	0	52.00
		Violet	WP0015	2.0	0	52.00

*7: Please refer to Stock Availability Codes on page 25.

FREQUENCY CONVERTERS / INVERTERS

NXS Series



The new NXS range supersedes the CXS range and is the result of many years of experience in designing and manufacturing reliable, robust drives. The previous CXS range has a name that is synonymous with reliability and the NXS series builds on that reputation. The combination of a highly reliable unit within a compact package, together with the advanced features listed below, make the NXS series the drive for all applications.

Features include:

- Compact space saving design
- Industrial RFI filter fitted as standard
- Flexible I/O configuration accepting both digital and analogue inputs / outputs
- Multi-application software package pre-installed
- Versatile range of PC tools for loading, adjusting and comparing parameters
- Range of accessories including brake resistors, additional I/O cards, alternative displays etc.

0.75kW to 90kW (in an IP21 rated enclosure)

Part No.	Mains Power (380-500V) and Current					Dimensions H x W x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXS0003V35A2H1	0.75	2.2	3.5	1.1	3.1	292x128x190	IP21	2	POA
NXS0004V35A2H1	1.1	3.1	4.4	1.5	4	292x128x190	IP21	2	POA
NXS0005V35A2H1	1.5	4	6	2.2	5.4	292x128x190	IP21	2	POA
NXS0007V35A2H1	2.2	5.4	7.7	3	7	292x128x190	IP21	2	POA
NXS0009V35A2H1	3	7	10	4	9	292x128x190	IP21	2	POA
NXS0012V35A2H1	4	9	13.2	5.5	12	292x128x190	IP21	2	POA
NXS0016V35A2H1	5.5	12	18	7.5	16	391x144x214	IP21	2	POA
NXS0022V35A2H1	7.5	16	24	11	22	391x144x214	IP21	2	POA
NXS0031V35A2H1	11	22	35	15	31	391x144x214	IP21	2	POA
NXS0038V35A2H1	15	31	47	18.5	38	519x195x237	IP21	2	POA
NXS0045V35A2H1	18.5	38	54	22	45	519x195x237	IP21	2	POA
NXS0061V35A2H1	22	45	68	30	61	519x195x237	IP21	2	POA
NXS0072V35A2H0	30	61	37	72	122	583x230x260	IP21	2	POA
NXS0087V35A2H0	37	72	45	87	144	583x230x260	IP21	2	POA
NXS0105V35A2H0	45	87	55	105	174	583x230x260	IP21	2	POA
NXS0140V35A2H0	55	105	75	140	210	747x300x295	IP21	2	POA
NXS0168V35A2H0	75	140	90	168	280	747x300x295	IP21	2	POA
NXS0205V35A2H0	90	168	110	205	336	747x300x295	IP21	2	POA

*7: Please refer to Stock Availability Codes on page 25.

Part No.	Mains Power (380-500V) and Current					Dimensions H x W x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXS0003V35A5H1	0.75	2.2	3.5	1.1	3.1	292x128x190	IP54	2	POA
NXS0004V35A5H1	1.1	3.1	4.4	1.5	4	292x128x190	IP54	2	POA
NXS0005V35A5H1	1.5	4	6	2.2	5.4	292x128x190	IP54	2	POA
NXS0007V35A5H1	2.2	5.4	7.7	3	7	292x128x190	IP54	2	POA
NXS0009V35A5H1	3	7	10	4	9	292x128x190	IP54	2	POA
NXS0012V35A5H1	4	9	13.2	5.5	12	292x128x190	IP54	2	POA
NXS0016V35A5H1	5.5	12	18	7.5	16	391x144x214	IP54	2	POA
NXS0022V35A5H1	7.5	16	24	11	22	391x144x214	IP54	2	POA
NXS0031V35A5H1	11	22	35	15	31	391x144x214	IP54	2	POA
NXS0038V35A5H1	15	31	47	18.5	38	519x195x237	IP54	2	POA
NXS0045V35A5H1	18.5	38	54	22	45	519x195x237	IP54	2	POA
NXS0061V35A5H1	22	45	68	30	61	519x195x237	IP54	2	POA
NXS0072V35A5H0	30	61	37	72	122	583x230x260	IP54	2	POA
NXS0087V35A5H0	37	72	45	87	144	583x230x260	IP54	2	POA
NXS0105V35A5H0	45	87	55	105	174	583x230x260	IP54	2	POA
NXS0140V35A5H0	55	105	75	140	210	747x300x295	IP54	2	POA
NXS0168V35A5H0	75	140	90	168	280	747x300x295	IP54	2	POA
NXS0205V35A5H0	90	168	110	205	336	747x300x295	IP54	2	POA

*7: Please refer to Stock Availability Codes on page 25.

NXL Series



The new NXL inverter series is extremely slim thus space saving and easy to use frequency controller optimised for low motor powers (from 0.37kW to 30kW 380-500V and 0.25-1,5kW 208-240V). The NXL modularity allows fast installation and easy service and maintenance on the field.

The flexible, standard I/O configuration includes 2 analogue inputs, 1 analogue output, 3+1 digital inputs, 1 relay output and RS485 (Modbus-protocol built in). Three phase current measurement and vector control are the basis for dynamic and accurate operation and for enhanced protection.

0.25kW to 1.1kW (in an IP20 rated enclosure)

Part No.	Mains Power (208-240V) and Current					Dimensions W x H x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXL0002V32C1N0	0.25	1.7	2.6	0.37	2.4	60x130x150	IP20	2	POA
NXL0003V32C1N1	0.55	2.8	4.2	0.75	3.7	84x184x174	IP20	2	POA
NXL0004V32C1N1	0.75	3.7	5.6	1.1	4.8	84x184x174	IP20	2	POA
NXL0006V32C1N1	1.1	4.8	7.2	1.5	6.6	84x220x174	IP20	2	POA

0.37kW to 1.5kW (in an IP20 rated enclosure)

Part No.	Mains Power (380-500V) and Current					Dimensions W x H x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXL0001V35C1N0	0.37	1.3	2	0.55	1.9	60x130x150	IP20	2	POA
NXL0002V35C1N0	0.55	1.9	2.9	0.75	2.4	60x130x150	IP20	2	POA
NXL0003V35C1N1	0.75	2.4	3.6	1.1	3.3	84x184x174	IP20	2	POA
NXL0004V35C1N1	1.1	3.3	5	1.5	4.3	84x184x174	IP20	2	POA
NXL0005V35C1N1	1.5	4.3	6.5	2.2	5.4	84x220x174	IP20	2	POA

*7: Please refer to Stock Availability Codes on page 25.

0.75kW to 22kW (in an IP21 rated enclosure)

Part No.	Motor Shaft Power (380-500V) and Current					Dimensions W x H x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXL0003V35C2H1	0.75	2.2	3.3	1.1	3.3	60x130x150	IP21	2	POA
NXL0004V35C2H1	1.1	3.3	5	1.5	4.3	84x184x174	IP21	2	POA
NXL0005V35C2H1	1.5	4.3	6.5	2.2	5.6	84x184x174	IP21	2	POA
NXL0007V35C2H1	2.2	5.6	8.4	3	7.6	84x220x174	IP21	2	POA
NXL0009V35C2H1	3	7.6	11.4	4	9	128x292x190	IP21	2	POA
NXL0012V35C2H1	4	9	13.5	5.5	12	128x292x190	IP21	2	POA
NXL0016V35C2H1	5.5	12	18	7.5	16	128x292x190	IP21	2	POA
NXL0023V35C2H1	7.5	16	24	11	23	128x292x190	IP21	2	POA
NXL0031V35C2H1	11	23	35	15	31	128x292x190	IP21	2	POA
NXL0038V35C2H1	15	31	47	18.5	38	128x292x190	IP21	2	POA
NXL0046V35C2H1	18.5	38	57	22	46	144x391x214	IP21	2	POA
NXL0061V35C2H1	22	46	69	30	61	144x391x214	IP21	2	POA

0.75kW to 22kW (in an IP54 rated enclosure)

Part No.	Motor Shaft Power (380-500V) and Current					Dimensions W x H x D [mm]	IP Rating	Stock Code*7	£ / Unit
	High Overload			Low Overload					
	P[kW]	I[H]	I[max]	P[kW]	I[L]				
NXL0003V35C5H1	0.75	2.2	3.3	1.1	3.3	128x292x190	IP54	2	POA
NXL0004V35C5H1	1.1	3.3	5	1.5	4.3	128x292x190	IP54	2	POA
NXL0005V35C5H1	1.5	4.3	6.5	2.2	5.6	128x292x190	IP54	2	POA
NXL0007V35C5H1	2.2	5.6	8.4	3	7.6	128x292x190	IP54	2	POA
NXL0009V35C5H1	3	7.6	11.4	4	9	128x292x190	IP54	2	POA
NXL0012V35C5H1	4	9	13.5	5.5	12	128x292x190	IP54	2	POA
NXL0016V35C5H1	5.5	12	18	7.5	16	144x391x214	IP54	2	POA
NXL0023V35C5H1	7.5	16	24	11	23	144x391x214	IP54	2	POA
NXL0031V35C5H1	11	23	35	15	31	144x391x214	IP54	2	POA
NXL0038V35C5H1	15	31	47	18.5	38	195x519x237	IP54	2	POA
NXL0046V35C5H1	18.5	38	57	22	46	195x519x237	IP54	2	POA
NXL0061V35C5H1	22	46	69	30	61	195x519x237	IP54	2	POA

*7: Please refer to Stock Availability Codes on page 25.

APPENDIX**Stock Availability Codes (*7)**

Description	Code
Normally available from Stock	0
Available on a 1 week delivery	1
Available on a 2 week delivery	2
Available on a 4 week delivery	4
Available on a 8 week delivery	8

The above delivery periods are based on a typical monthly usage rate and normal stockholding levels. However, unusually high demand may mean that from time to time the lead time offered is different from that stated above.