

Instructions & Documentation

1. General information

Parts overview control & monitoring

Printed Matter Number : 2946 0646 16

Applicable to : -

2. Document overview

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3. Document Information and History

Date	Description	Author
04/08/2015	Draft from ed1	CTS-TVE
12/08/2015	4.1 : "PureLogic Standard" added + small updates/corrections 11.1 : CAN cable 10.1 : USB to Ethernet download tool	VTI-WC
25/08/2015	General Update	VTF-GW

4. Elektronikon Mk5

4.1. Modules

Mk5 Standard

**PART NUMBER:**

1900 5200 02
1900 5200 01
1900 5200 00

DESCRIPTION:

- › Low cost regulator (24x28mm display, mono colour & icons)
- › Basic functions
- › 3x Pt1000
- › 1x pressure transducer
- › 4x digital inputs
- › 6x digital outputs
- › IO (expansions)
- › CAN
- › Ethernet
- › From 1900 5200 02: higher protection on Digital Inputs circuit + Update on Ethernet port + Reinforcement connections

PART NUMBER:

1900 5200 06
1900 5200 05

DESCRIPTION:

- › De-branded

Mk5 Graphic

**PART NUMBER:**

1900 5200 13
1900 5200 12
1900 5200 11
1900 5200 10

DESCRIPTION:

- › Graphic controller (3,5" QVGA screen (74x55mm) 320x240 pixels)
- › 5x Pt1000
- › 2x pressure transducer
- › 4x digital inputs
- › 9x digital outputs
- › IO (expansions)
- › 2x CAN
- › Ethernet
- › Memory card

**PART NUMBER:**

1900 5200 17
1900 5200 16
1900 5200 15

DESCRIPTION:

- › De-branded
- › Based on 1900 5200 13

PART NUMBER:

1900 5200 90

DESCRIPTION:

- › K7,K8,K9 replaced by Solid State Relays

Mk5 Graphic +



PART NUMBER:

1900 5200 22
1900 5200 21
1900 5200 20

DESCRIPTION:

- › Graphic plus controller (standard size 5,7" QVGA screen (120x92 mm) 320x240 pixels)
- › 1x IO (expansions)
- › 2x CAN
- › 1x Ethernet
- › 1x Memory card

Mk5 Graphic + Quincy



PART NUMBER:

1900 5200 25

DESCRIPTION:

- › Used by Quincy
- › Based on 1900 5200 22

Mk5 Standard DIN controller



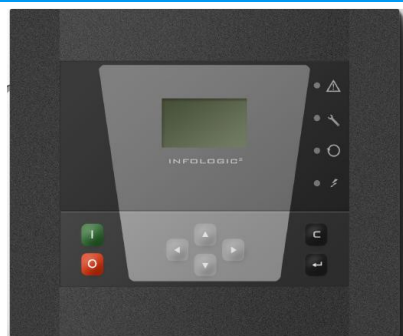
PART NUMBER:

1900 5200 52
1900 5200 51
1900 5200 50

DESCRIPTION:

- › 7 x Digital output
- › 10 x Digital input
- › 1 x PT100(0) temperature input
- › 2 x pressure transducer input
- › 4 x transmitter input (previous models had 4x Pt1000)

InfoLogic²



PART NUMBER:

1900 5200 72
1900 5200 71
1900 5200 70

DESCRIPTION:

- › Based on 1900 5200 02
- › With 4 - 20mA Output starting from 1900 5200 72
- › Used by:
WCO / Grassair / Quincy

AirLogic²



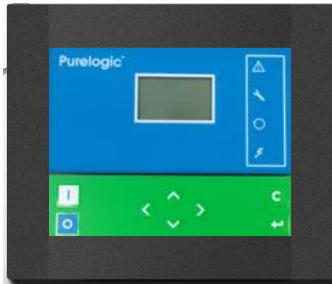
PART NUMBER:

1900 5200 82
1900 5200 81
1900 5200 80

DESCRIPTION:

- › Based on 1900 5200 13
- › Used by:
WCO / Grassair / Quincy

PureLogic Standard



PART NUMBER:
1900 5200 79

DESCRIPTION:

- › Based on 1900 5200 02
- › With 4 – 20mA Output starting from 1900 5200 75
- › Used by:
WCO / Grassair / Quincy

PureLogic



PART NUMBER:
1900 5200 89

DESCRIPTION:

- › Based on 1900 5200 13
- › Used by:
WCO / Grassair / Quincy

PART NUMBER:
1900 5200 92

DESCRIPTION:

- › K7,K8,K9 replaced by Solid State Relays

Air Control 5.0



PART NUMBER:
1900 5200 75
1900 5200 74
1900 5200 73

DESCRIPTION:

- › Based on 1900 5200 02
- › With 4 – 20mA Output starting from 1900 5200 75
- › Used by:
Alup / Agre

Air Control 5.1

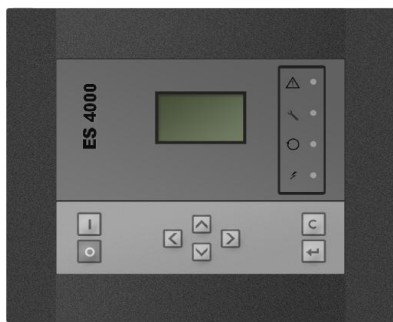


PART NUMBER:
1900 5200 85
1900 5200 84
1900 5200 83

DESCRIPTION:

- › Based on 1900 5200 13
- › Used by:
Alup / Agre

ES4000



PART NUMBER:

1900 5200 78
1900 5200 77
1900 5200 76

DESCRIPTION:

- › Based on 1900 5200 02
- › With 4 - 20mA Output starting from 1900 5200 78
- › Used by:
Ceccato / Creemers / Mark / Mauguière / Puska / CP
- › From 1900 5200 77: higher protection on Digital Inputs circuit + Update on Ethernet port,+ Reinforcement connections

ES4000 Advanced



PART NUMBER:

1900 5200 88
1900 5200 87
1900 5200 86

DESCRIPTION:

- › Based on 1900 5200 13
- › Used by:
Ceccato / Creemers / Mark / Mauguière / Puska / CP

4.2. Expansion modules

Mk5 IO2 module



KIT NUMBER:

2230 5200 00

CONTENT:

1900 5200 33 Module
WAGO Connectors
1900 5200 32 Module
1900 5200 31 Module
1900 5200 30 Module

DESCRIPTION:

- › IO module used with Mk5 user interface
- › 15x relay output
- › 16x digital inputs
- › 11x temperature inputs (Pt1000) (1900 5200 33 with improved signal filtering)
- › 5x pressure input (transducer)
- › 1x 4..20mA (powered) input

KIT NUMBER:

2230 5200 01

CONTENT:

1900 5200 37 Module (de-branded)
WAGO Connectors
1900 5200 36
1900 5200 35

DESCRIPTION:

- › De-branded
- › Based on 1900 5200 33

CONTENT:

1900 5200 95

DESCRIPTION

K1..K9 replaced by Solid State Relays

CONTENT:

1900 5200 97

DESCRIPTION

K1..K9 replaced by Solid State Relays
De-branded (PureLogic)

Mk5 IO3-4 module



KIT NUMBER:

2230 5200 02

CONTENT:

1900 5200 42

1900 5200 41

1900 5200 40

Module

WAGO Connectors

Module

Module

DESCRIPTION:

- › IO module used with Mk5 user interface
- › 10x temperature inputs Pt100 or Pt1000 (1900 5200 42 with improved signal filtering)
- › 4x pressure input (transducer)
- › 12x 4..20mA input
- › 8x 4..20mA analog output

KIT NUMBER:

2230 5200 03

CONTENT:

1900 5200 46

1900 5200 45

Module (de-branded)

Module (de-branded)

DESCRIPTION:

- › De-branded
- › Based on 1900 5200 42

Mk5 SPM kit with 5 measurement points (compatible with Mk5 Elektronikon)



KIT NUMBER:

2230 0055 00

CONTENT:

1089 0457 97 Module

Sensors

Cables

DESCRIPTION:

- › Expansion module kit suitable for DIN rail mounting
- › Contains SPM 42000 monitoring module which provides 5 inputs for standard SPM transmitter

Mk5 SPM kit with 7 measurement points (compatible with Mk5 Elektronikon)



KIT NUMBER:

2230 0053 00

CONTENT:

1089 0457 97 Module

Sensors

Cables

DESCRIPTION:

- › Expansion module kit suitable for DIN rail mounting
- › Contains SPM 42000 monitoring module which provides 7 inputs for standard SPM transmitter
- › Contains no programs or settings

Mk5 SPM sensors

PART NUMBER:

1089 0457 04

1089 0457 06

1089 0457 64

1089 0457 80

L= 75,5mm

L= 129,5mm

L= 361,5mm

L= 164,5mm

DESCRIPTION:

- › SPM pulse transducer 42 000 range

Mk5 SPM cables

PART NUMBER:		DESCRIPTION:
1089 0457 60	4 m	› SPM cable › Connection between Mk5 SPM module and SPM sensors 42 000 range
1089 0457 08	6 m	

4.3. Cables

Mk5 Module-to-module cable (Daisy chain cable)

PART NUMBER:		DESCRIPTION:
1622 5099 01	500 mm	› Link between different modules via IO (RJ11) socket. (e.g. from Master to IO2)
1622 5099 03	1000 mm	
1622 5099 04	1500 mm	
1622 5099 05	2000 mm	

Mk5 Connection cable IO2 to 1x5

PART NUMBER:		DESCRIPTION:
1625 8100 01	500 mm Type A	› IO2 to 1x5
1625 8100 02	1000 mm Type A	
1625 8100 03	1500 mm Type A	
1625 8100 04	2000 mm Type A	
1625 8100 05	1500 mm Type C	

4.4. Mk5 upgrades

To AC Elektronik Mk5

Instructions published on GBP	PM 2946 1255 01	› Mk3/4 to Mk5 for GA 5-90 (VSD)
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To MB Mk5

Instructions published on Worthington MBP	PART NUMBER: 2230 5005 01	DESCRIPTION: › Retrofit kit Worthington MCI controller to Airlogic ²
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4.5. Software & downloads

Mk5 SPECI5

PART NUMBER: 1900 5270 01	DESCRIPTION: › Field download program › Needed to activate some options e.g. remote control › To be used together with Core files & Data file, both available on Lotus Notes Software DB
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Mk5 MODI5

PART NUMBER: 1900 5270 02	DESCRIPTION: › Field Service Program › For online & offline (.cs5 files) commissioning › To be used together with Core files & Data file, both available on Lotus Notes Software DB
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Mk5 Text editing s/w

PART NUMBER:	DESCRIPTION:
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1900 5270 03	› Display text translations › To be used together with Core files & Data file, both available on Lotus Notes Software DB
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Mk5 Model Filter

PART NUMBER: 1900 5270 05	DESCRIPTION: › Tool for removing models from Mk5 database › To be used together with Core files & Data file, both available on Lotus Notes Software DB
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Mk5 Magni5

PART NUMBER: 1900 5270 05	DESCRIPTION: › Logging program for Mk5 controllers › To be used together with Core files & Datafile, both available on Lotus Notes Software DB
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5. Elektronikon MkIV

5.1. Modules

MkIV Elektronikon I Module / A controller



ITEM NAME: Elektronikon I / A controller	DESCRIPTION: › Low cost regulator
PART NUMBER: 1900 0711 03	› Basic functions
ITEM NAME: Elektronikon I GA 5-11c	DESCRIPTION: › Increased min. unload time, -03 can be replaced by -06 but -06 not by -03
PART NUMBER: 1900 0711 06	› Only for GA 5-11c machines
ITEM NAME: Elektronikon I (Heidelberg)	DESCRIPTION: › Used on SF machines produced for Heidelberg (P010=1028)
PART NUMBER: 1900 0712 32	
ITEM NAME: Elektronikon I (Mann Roland)	DESCRIPTION: › Used on GA machines produced for Mann Roland (with special s/w for MRO)
PART NUMBER: 1900 0712 41	

MkIV Elektronikon I+ Module / A+ controller



ITEM NAME: Elektronikon I+ / A+ controller	DESCRIPTION: › Replaces all previous MkIV Elektronikon I versions
PART NUMBER: 1900 0712 71	› Low cost regulator › Basic functions › Fitted as standard on GA 5-22 machines



ITEM NAME:

WCO Infologic

PART NUMBER:

1900 0712 75

DESCRIPTION:

- › Elektronikon I special version Worthington

MkIV Elektronikon II Module / B+ controller



ITEM NAME:

Standard Elektronikon II / B+ controller

PART NUMBER:

1900 0710 12

DESCRIPTION:

- › 4x16 regulator
- › CAN communication for service, download, ...
- › Interface box or CAN card (IXXAT) to PC needed
- › Contains RS485 for VSD
- › Integrated sequencer MCC

ITEM NAME:

Graphic Elektronikon II / B+ controller

PART NUMBER / KIT NUMBER:

1900 0712 81 / 8092 2812 22

DESCRIPTION:

- › MkIV Elektronikon II module with high resolution screen, used for languages with graphical fonts, such as Chinese



ITEM NAME:

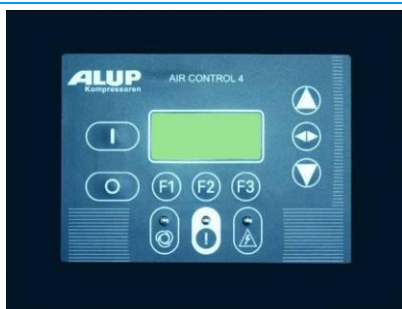
Elektronikon II (Multibrand)

PART NUMBER:

1900 0713 71

DESCRIPTION:

- › Special version Multibrand
- › De-branded



ITEM NAME:

Alup Air Control 4

PART NUMBER:

1900 0713 75

DESCRIPTION:

- › Elektronikon II special version Alup



ITEM NAME:

WCO AirLogic

PART NUMBER:

6256 3100 00

DESCRIPTION:

- › Elektronikon II special version Worthington

MkIV Elektronikon III Module/D controller



ITEM NAME:

Standard Elektronikon III / D controller

PART NUMBER:

1900 0710 31 / 1900 0710 32

DESCRIPTION:

- ›

ITEM NAME:

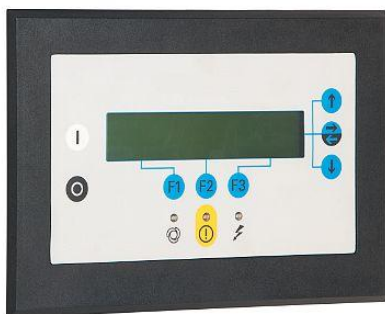
Graphic Elektronikon III / D controller

PART NUMBER:

1900 0712 91 / 1900 0712 92

DESCRIPTION:

- › MkIV Elektronikon III module with high resolution screen, used for languages with graphical fonts, such as Chinese



ITEM NAME:

Elektronikon III (Multibrand)

PART NUMBER:

1900 0713 81 / 1900 0713 82

DESCRIPTION:

- › De-branded: special version Multibrand

ITEM NAME:

Graphic Elektronikon III (Multibrand)

PART NUMBER:

1900 0713 92

DESCRIPTION:

- › Special version Multibrand with high resolution screen, used for languages with graphical fonts, such as Chinese
- › De-branded

5.2. Expansion modules

MkIV AIE1 kit



KIT NUMBER:

8092 2482 05

CONTENT:

1900 0710 41 Module

Connectors

No cable

DESCRIPTION:

- › Analogue Input Expansion module suitable for DIN rail mounting
- › Provides input expansion for 2x Pt100/1000 temperature sensors and 2x AC pressure transducers
- › Can be used to add user defined temperature and pressure inputs with modified download file
- › Contains no programs or settings
- › No separate downloading necessary (only main controller)
- › Number of modules limited by hardware

MkIV AIE2 kit

**KIT NUMBER:**

8092 2482 14

CONTENT:

1900 0710 52 Module

Connectors

No cable

DESCRIPTION:

- › Analogue Input Expansion module suitable for DIN rail mounting
- › Provides input expansion for 4x 4..20mA signals
- › Can be used to add user defined 4..20mA inputs with modified download file
- › Separate power supply required for sensors
- › No separate downloading necessary (only main controller)
- › Number of modules limited by hardware
- › Improved hardware, new 4..20mA inputs (FET's)

MkIV AIE3 kit

**KIT NUMBER:**

8092 2482 22

CONTENT:

1900 0710 62 Module

Connectors

No cable

DESCRIPTION:

- › Analogue Input Expansion module suitable for DIN rail mounting
- › Provides input expansion for 5x Pt100 temperature sensors for motor monitoring
- › Can be used to add user defined temperature inputs with modified download file
- › Contains no programs or settings
- › No separate downloading necessary (only main controller)
- › Number of modules limited by hardware

MkIV AIE4 kit

**KIT NUMBER:**

8092 2482 40

CONTENT:

1900 0710 81 Module

Connectors

No cable

DESCRIPTION:

- › Analogue Input Expansion module suitable for DIN rail mounting
- › Provides input expansion for 5x Pt1000 temperature sensors for motor monitoring
- › Can be used to add user defined temperature inputs with modified download file
- › Contains no programs or settings
- › No separate downloading necessary (only main controller)
- › Number of modules limited by hardware

MkIV DIOE kit

**KIT NUMBER:**

8092 2482 47

CONTENT:

1900 0710 71 Module

Connectors

No cable

DESCRIPTION:

- › Digital I/O Expansion module suitable for DIN rail mounting
- › Provides 4 digital inputs and 4 digital outputs (10A - 250Vmax)
- › Power supply needed
- › Contains no programs or settings
- › No separate downloading necessary (only main controller)
- › Number of modules limited by hardware

MkIV AIOE kit

**KIT NUMBER:**

1900 0711 51

CONTENT:

Module

Connectors

No cable

DESCRIPTION:

- › Expansion module suitable for DIN rail mounting
- › Provides 4 high accuracy pressure inputs (16bit) and 2 analogue outputs (4..20mA)
- › Used on turbo's

MkIV EMIX kit

**KIT NUMBER:**

8092 2811 23

CONTENT:

1900 0711 62 Module

Connectors

No cable

DESCRIPTION:

- › Expansion module, inclusive of connectors and suitable for DIN rail mounting
- › Provides:
 - 2 pressure inputs,
 - 1 temperature input (Pt1000),
 - 1 analogue input (4..20mA) and
 - 3 digital outputs
- › 2 digital outputs (10A ~ 250V max.)
- › Used for I-CD dryer and in ES06 cubicle

Mk5 SPM kit with 5 measurement points (compatible with MkIV Elektronikon)

**KIT NUMBER:**

2230 0057 00

CONTENT:

1089 0457 95 Module

Sensors

Cables

DESCRIPTION:

- › Expansion module kit suitable for DIN rail mounting
- › Contains SPM 42000 monitoring module which provides 5 inputs for standard SPM transmitter

Mk5 SPM kit with 7 measurement points (compatible with MkIV Elektronikon)



KIT NUMBER:

2230 0056 00

CONTENT:

1089 0457 95 Module

Sensors

Cables

DESCRIPTION:

- › Expansion module kit suitable for DIN rail mounting
- › Contains SPM 42000 monitoring module which provides 7 inputs for standard SPM transmitter
- › Contains no programs or settings

MkIV SPM modules 40 000 range

PART NUMBER

1089 0457 69 5 inputs
1089 0457 70 7 inputs

DESCRIPTION:

- › SPM module 40 000 range
- › For cables up to 4m only

MkIV SPM modules 42 000 range

PART NUMBER

1089 0457 76 5 inputs
1089 0457 77 7 inputs

DESCRIPTION:

- › SPM module 42 000 range

MkIV SPM Sensors 40 000 range

PART NUMBER

1089 0457 01 L= 61,5mm
1089 0457 03 L= 150,5mm
1089 0457 53 L= 115,5mm
1089 0457 63 L= 277,5 mm

DESCRIPTION:

- › SPM pulse transducer 40 000 range
- › For cables up to 4m only

MkIV/Mk5 SPM Sensors 42 000 range

PART NUMBER

1089 0457 04 L= 75,5mm
1089 0457 06 L= 129,5mm
1089 0457 64 L= 361,5mm
1089 0457 80 L= 164,5mm

DESCRIPTION:

- › SPM pulse transducer 42 000 range

MkIV SPM cables

PART NUMBER

1089 0457 56 4m
1089 0457 57 5m
1089 0457 58 6m

DESCRIPTION:

- › SPM cable 40 000 range

Mk5 SPM cables

PART NUMBER:

1089 0457 60 4 m
1089 0457 08 6 m

DESCRIPTION:

- › SPM cable
- › Connection between Mk5 SPM module and SPM sensors 42 000 range

5.3. Cables

MkIV Module-to-module cable

**PART NUMBER:**

1622 0661 02	150 mm
1622 0661 01	600 mm
1622 0661 03	1100 mm
1622 0661 04	1400 mm
1621 0832 00	1550 mm
1621 6770 00	2500 mm

DESCRIPTION:

- › Module-to-module cable
- › 2x9 pins
- › Used for connecting expansion modules to each other or the main MkIV controller

5.4. MkIV upgrades

To AC Elektronik MkIV

Instructions published on GBP

PM 9820 4219 00	› Mk3 to MkIV for ZT18-55 / ZR45-55 / SF6-15
PM 2946 0456 02	› Mk3 to MkIV for Z >55 / ZE / ZA / GA >90
PM 9820 4217 00	› Mk3 to MkIV for GA 5-55C
PM 9820 4218 00	› Mk3 to MkIV for GA 55-90C / GA 30-90VSD
PM 2946 0521 00	› Mk3 to MkIV for ZH
PM 9820 3763 00	› Mk1/Mk2 to MkIV GA 45-75
PM 2946 0520 05	› Mk1/2 to MkIV for Z >55 / ZE/ZA / GA >90
PM 2946 0671 02	› ElectroPneumatic to MkIV
PM 2946 0520 04	› Mk1 to MkIV oil free air
PM 2946 0671 01	› EPM to MkIV for Z-units

To MB MkIV

Instructions published on MBP and on the Lotus Notes "Alup information" database

PART NUMBER:

2230 5005 90 to 2230 5005 96
2230 5006 90 to 2230 5006 96
2230 5007 90 to 2230 5007 93

DESCRIPTION:

- › Alup Air Control to MkIV for SCK
- › Alup Air Control to MkIV for Opus
- › Alup Air Control to MkIV for Largo



Installation instructions for retrofit kit
Control (Mk3) to Airlogic (Mk4)
Kit code 2200902405
Instruction code 9828401610

Kit intended for compressors:		
Model	Pressure	Language
RL-RM-RMB 30-100HP	8-10-13 bar	Italian, English, German, French, Spanish, Dutch, Swedish, Danish.
DRA-RMD	7.5-10-13 bar	
RL-RM-RMB Inverter	8-10 bar	

PART NUMBER:

2200 9024 05

DESCRIPTION:

- › Retrofit kit Ceccato/Mark Mk3 to Airlogic
- › Applicable to RL – RM – RMB – DRA – RMD units

5.5. Software & download

Atlas Copco

DESCRIPTION:

Multibrands

DESCRIPTION:

› Software and tools are available in the Lotus Notes “Engineering docs” database

6. Elektronikon Mk3 (All parts are obsolete)

6.1. Modules

Mk3 REB Module

PART NUMBER:

1900 0700 52

DESCRIPTION:

› Relay expansion box for 3 outputs

Mk3 LRR Module

PART NUMBER:

1900 0700 08

DESCRIPTION:

› Low range controller

Mk3 LRR2 Module



PART NUMBER:

2902 0021 00

DESCRIPTION:

› Low range controller – new generation

Mk3 HRRS Module



PART NUMBER:

1900 0701 06

DESCRIPTION:

› Standard high range controller

Mk3 HRRE Module



PART NUMBER:

1900 0701 25

DESCRIPTION:

› Extended high range controller

PART NUMBER:

1900 0701 26

DESCRIPTION:

- › Extended high range controller
- › Used on the ZH machines only

Mk3 HRRE D1 Module**PART NUMBER:**

1900 0701 33

DESCRIPTION:

- › 4x Pt100 temperature input
- › 4x Pressure transmitter

Mk3 HRRE D2 Module**PART NUMBER:**

1900 0701 34

DESCRIPTION:

- › 4x Temperature transmitter
- › 4x Pressure transmitter

6.2. Expansion module**Mk3 SIOE****PART NUMBER:**

1900 0701 45

1900 0701 48

DESCRIPTION:

- › Sensor Input/Output Expansion module, inclusive of connectors
- › Provides input expansion for 4x Pt1000 temperature sensors and 4x AC pressure transducers

Mk3 SIOE D1**PART NUMBER:****DESCRIPTION:**

1900 0701 46
1900 0701 49

- › Sensor Input/Output Expansion module, inclusive of connectors
- › Provides input expansion for 4x temperature sensor Pt100 and 4x pressure transmitters (all 4..20mA)

Mk3 SIOE D2



PART NUMBER:

1900 0701 47
1900 0701 50

DESCRIPTION:

- › Sensor Input/Output Expansion module, inclusive of connectors
- › Provides input expansion for 4x temperature transmitters and 4x pressure transmitters (all 4..20mA)

Mk3 DIOE



PART NUMBER:

1900 0701 53

DESCRIPTION:

- › Digital Input/Output Expansion module, inclusive of connectors
- › Provides input expansion for 8x digital (volt free) inputs and 8x digital (volt free) outputs

Mk3 COM1



PART NUMBER:

1900 0701 63

DESCRIPTION:

- › Communication expansion module, inclusive of connectors
- › Enables communication between the Mk3 controller and a PC over RS232

Mk3 COM2



PART NUMBER:

1900 0701 82

DESCRIPTION:

- › Communication expansion module, inclusive of connectors
- › Enables communication between the Mk3 controller and the VSD inverter

Mk3 Modbus

**PART NUMBER:**

1900 0701 72

DESCRIPTION:

- › Communication expansion module, inclusive of connectors
- › Enables communication between the Mk3 controller and ES100/ES300

Mk3 Modbus

**PART NUMBER:**

8055 2158 03

DESCRIPTION:

- › Communication expansion module, inclusive of connectors
- › Enables Modbus communication between the Mk3 controller and any other Modbus system

6.3. Cables

Mk3 Module-to-module cable

**PART NUMBER:**

1613 7305 00

DESCRIPTION:

- › Module-to-module connection cable
- › Mk3 only, not compatible with MkIV

7. Elektronikon Mk1/2 (All parts are obsolete)

7.1. Spare parts

Touch panel

**PART NUMBER:**

1614 7240 01 English
1614 7238 09 Japanese
1614 7238 05 German
1614 7240 05 French

DESCRIPTION:

- › Touch panel for Mk1/2 Elektronikon

8. Non-Elektronikon controllers

8.1. Modules

ES99

**PART NUMBER:**

2202 8420 00 AC layout
2200 7042 34 MB layout
2202 5500 71 Abac layout

DESCRIPTION:

› Used on AC and MB 7-15kW Oil Injected Screw Compressors

ES3000

**PART NUMBER:**

2202 3602 75 12-24Vac CE
2203 3013 01 12-24Vac CE New
2202 8420 11 12Vac UL
2202 8689 80 12Vac MPa

DESCRIPTION:

› Used on MB 7-90kW Oil Injected Screw Compressors

MC2

**PART NUMBER:**

2236 1065 43 Fixed Speed EU
2236 1065 44 Fixed Speed RU
2236 1065 45 Variable Speed EU
2236 1065 46 Variable Speed RU
2236 1099 02 Variable speed incl. sequencing module

DESCRIPTION:

› Used on Abac and Balma Oil Injected Screw Compressors

Air Control 1

**PART NUMBER:**

Cross reference table published on MBP and on the Lotus Notes "Alup information" database

DESCRIPTION:

› Used on Alup Compressors produced before 2008

Air Control 2

**PART NUMBER:**

Cross reference table published on MBP and on the Lotus Notes "Alup information" database

DESCRIPTION:

› Used on Alup Compressors produced before 2008

Air Control 3



PART NUMBER:

Cross reference table published on MBP and on the Lotus Notes "Alup information" database

DESCRIPTION:

- › Used on Alup Compressors produced before 2008

8.2. Software & downloads

Air Control 1-2-3 programmer



PART NUMBER:

AL13 6013 17

DESCRIPTION:

- › Used to flash software on Air Control 1, 2 and 3 controllers for Alup in the field.
- › RS-232 PC connection to 4-pin interface of the controller
- › Delivered with programming adapter, instruction and CD-rom with flashing software
- › Controller software can be found on the Lotus Notes "Alup information" database

9. Connectivity products

9.1. Gateway modules



PART NUMBER:

2230 0068 00

DESCRIPTION:

- › Converts Mk5/MkIV protocol to Modbus or Profibus protocol
- › AC branded

Module:

1900 5200 60



PART NUMBER:

2230 0115 00

DESCRIPTION:

- › Converts Mk5/MkIV protocol to Modbus or Profibus protocol
- › De-branded

Module:

1900 5200 65

ComBox-S MkIV

**KIT NUMBER:**

8092 2482 54

CONTENT:

1900 0711 41
2-pole connector
No cable

DESCRIPTION:

- › Converts CANbus to serial communication line (RS485, RS232, current loop)
- › To be downloaded with new software available on Lotus Notes software DB
- › Conversion Mk3 (COM1) to Mk4
- › Converts CAN communication to the Modbus protocol, which can be used for remote monitoring and control

MB ModBox

**KIT NUMBER:**

6256 3600 00

DESCRIPTION:

- › Converts CANbus to serial communication line (RS485, RS232, current loop)
- › To be downloaded with new software available on Lotus Notes software DB
- › Conversion Mk3 (COM1) to Mk4
- › Converts CAN communication to the Modbus protocol, which can be used for remote monitoring and control

ComBox-P MkIV

**KIT NUMBER:**

8092 2495 75

CONTENT:

1900 0711 42
Connectors
No cable

DESCRIPTION:

- › Converts CAN communication to the Profibus protocol, which can be used for remote monitoring and control
- › To be downloaded with new software available on Lotus Notes software DB

MB ProfiBox

**KIT NUMBER:**

6256 3128 00

DESCRIPTION:

- › Converts CAN communication to the Profibus protocol, which can be used for remote monitoring and control
- › To be downloaded with new software available on Lotus Notes software DB

9.2. ComBox-E + AirContact

AIRContact



KIT NUMBER / PART NUMBER:

2230 0023 90

DESCRIPTION:

- › AIRContact kit including all cables

KIT NUMBER / PART NUMBER:

1900 0711 82

DESCRIPTION:

- › AIRContact (quadband) with internal modem supply
- › Only AirContact (spare part)

KIT NUMBER / PART NUMBER:

1900 0711 80

DESCRIPTION:

- › Field retrofit kit (external power supply)
- › To solve battery problems on field installations

Analogue modem 56k



PART NUMBER:

1900 0711 15

DESCRIPTION:

- › To be used with AIRconnect applications and analogue telephone line

ComBox-E



KIT NUMBER / PART NUMBER:

8092 2826 96 / 1900 0711 71

CTS KIT NUMBER

2230 0023 91

CONTENT

- Module
- Cables
- Fittings
- Instruction

DESCRIPTION:

- › Communication module that converts CAN to Ethernet/IP protocol (Industrial Protocol, no TCP/IP)
- › To be downloaded with new software available on Lotus Notes software DB
- › Part of AirConnect toolkit

ComBox-E SMARTLINK



KIT NUMBER / PART NUMBER:

2230 0023 91 / 1900 0711 71

DESCRIPTION:

- › ComBox E retrofit kit
- › To be downloaded with the monitoring toolkit available in LN

AIRContact + ComBox-E Kit



KIT NUMBER:

8092 2878 23
2230 0023 92

DESCRIPTION:

- › AIRcontact + ComBox E retrofit kit



DIGI 2G/3G router kit



KIT NUMBER:

2230 0196 00

DESCRIPTION:

- › Kit to provide wireless connection for ComBox-E or ES130-360, replaces kit 2230 0017 00 (contains 1089 9620 18 - WR21-U8..)
- › - Router + 2 antennas + DIN rail mount
- › - SIM card to be provided locally



SPARE PARTS

1089 9620 24 2G/3G Router

1089 9620 12 Antenna

1089 9620 19 DIN rail mounting bracket

1089 9620 04 Power Cord

DESCRIPTION:

- › WR21-U9... spare part router, including 2m Ethernet cable, power supply adaptor
- › spare part penta band antenna 5m cable
- › spare part DIN rail mounting bracket
- › spare part: power cord IEC Schuko to C13 1.8 meter

Wall mounted kits



ITEM NAME:
Ethernet Connect Box
KIT NUMBER:
8092 2854 88

DESCRIPTION:

- › Wall mounted box containing a ComBox E and transformer
- › Monitoring toolkit available on LN contains all applications and user manuals

ITEM NAME:
GSM Connect Box
KIT NUMBER:
8092 2854 96

DESCRIPTION:

- › Wall mounted box containing an AIRContact (EU), a ComBox E and a transformer
- › Monitoring toolkit available on LN contains all applications and user manuals

ITEM NAME:
Analogue Connect Box
KIT NUMBER:
8092 2855 87

DESCRIPTION:

- › Wall mounted box containing an analogue modem, a ComBox E and a transformer
- › Monitoring toolkit available on LN contains all applications and user manuals

Mobistar SIM FOR AirContact (SMS)



PART NUMBER:
0981 0405 10

Small Demo box



Small Demo Box

PART NUMBER:
8102 0454 19

DESCRIPTION:

- › Contains an Elektronikon MkIV B controller and an AIRContact. The box is able to simulate shutdown warnings, maintenance warnings, shutdowns, an emergency stop and power failure.

Large Demo box



PART NUMBER:
8102 0454 01

DESCRIPTION:

- › Contains two Elektronikon MkIV B controllers, one Elektronikon MkIV D controller, one ComBox-E and one AIRContact. The box is able to simulate shutdown warnings, maintenance warnings, shutdowns, an emergency stop and power failure.

9.3. SMARTBOX

SMARTBOX kit for MK5 Elektronikon

**PART NUMBER:**

2230 0500 02
Kit Mk5 **SMARTBOX** 24 VAC power supply

DESCRIPTION:

Supersedes 2230 0500 00: Service kit **SMARTBOX** to connect to Mk5 elektronikon, including power supply 24 VAC, antenna 1m and ethernet cable 2m.

SMARTBOX kit for MKIV Elektronikon

**PART NUMBER:**

2230 0501 02
Kit MkIV **SMARTBOX** 24 VAC power supply

DESCRIPTION:

Supersedes 2230 0501 00: Service kit **SMARTBOX** to connect to MkIV elektronikon, including power supply 24 VAC, antenna 1m and CAN cable 2m.

Spare parts:**SMARTBOX ethernet Pack****PART NUMBER:**

1630 0707 82 Modem kit Mk5 E

DESCRIPTION:

Supersedes 1630 0707 81; includes **SMARTBOX**, 24 Vac supply and ethernet cable

SMARTBOX CAN Pack**PART NUMBER:**

1630 0886 82 Modem kit MkIV

DESCRIPTION:

Supersedes 1630 0886 81; includes **SMARTBOX**, 24 Vac supply and CAN cable

	PART NUMBER: 1630 0928 01 antenna 1m 1630 0928 02 antenna 5m	DESCRIPTION: antenna for use with SMARTBOX
	PART NUMBER: 1630 9900 00	DESCRIPTION: 110/230 VAC 50/60Hz Power Supply incl. SMARTBOX power cable
	PART NUMBER: 1623 4029 01 ethernet cable 0.5m 1623 4029 02 ethernet cable 1m 1623 4029 03 ethernet cable 2m 1623 4029 04 ethernet cable 5m	DESCRIPTION: Industrial ethernet patch cables (straight), one shielded and one unshielded side
	PART NUMBER: 1630 0953 00 CAN cable 2m	DESCRIPTION: CAN cable with 120 Ohm end resistors build in

Tools

	PART NUMBER: 1088 0021 38	DESCRIPTION: USB cable for SMARTBOX commissioning (networked machines), 1,8 meter, Type A-to-Mini-B
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9.4. ICONS box for Brand Portfolio

ICONS box kit for MK5 Elektronikon

	PART NUMBER: 2230 0500 05 Kit Mk5 ICONS box VAC power supply Contains 1630 0707 85	DESCRIPTION: Service kit ICONS box to connect to Mk5 elektronikon, including power supply 24 VAC, antenna 1m and ethernet cable 2m.
---	---	--

ICONS box kit for MKIV Elektronikon



PART NUMBER:

2230 0501 05
Kit MkIV **ICONS** BOX 24 VAC power supply
Contains 1630 0886 85

DESCRIPTION:

Retrofit fit **ICONS** box to connect to MkIV Elektronikon, including power supply 24 VAC, antenna 1m and CAN cable 2m.

9.5. MK5 IO connectivity kit

Service kit for SMARTLINK monitoring for Remote Sensor (AirNet data) or 'Digital' – competitor Machine



PART NUMBER:

2230 0502 00
Mk5 IO connectivity kit

DESCRIPTION:

Service kit: Mk5 std DIN controller & **SMARTBOX** to connect competitor machines to **SMARTLINK** or to upload AirNet data.

Contains Mk5 std DIN 1900 5200 52 & Mk5 **SMARTBOX** kit 2230 0500 02.

9.6. SMARTLINK – ICONS website

Functional licenses for SMARTLINK



PART NUMBER:

1630 0645 00 **SMARTLINK** Uptime Machine
1630 0646 00 **SMARTLINK** Uptime AirNet
1630 0647 00 **SMARTLINK** Energy Machine
1630 0648 00 **SMARTLINK** Energy AirNet

DESCRIPTION:

SMARTLINK licenses (digital)

If this is your first order of digital licenses, please be sure to make the settings in your ERP (BPCS/SAP/Scala) system to include item type "L" (see digital license portal documentation)

licences (old)



PART NUMBER:

1630 0071 00 Notification+
1630 0072 00 Supervision
1630 0074 00 Visualisation+
1630 0075 00 Analysis

Functional licenses for ICONS website

	PART NUMBER:	DESCRIPTION:
	1630 0645 05 ICONS Uptime Machine	ICONS licenses (digital)
	1630 0646 06 ICONS Uptime Airnet	
		If this is your first order of digital licenses, please be sure to make the settings in your ERP (BPCS/SAP/Scala) system to include item type "L" (see digital license portal documentation)

10. Tools & Accessories

10.1. General

Ethernet crossover cable



PART NUMBER:	DESCRIPTION:
1622 5756 00 2 m	› Ethernet <u>crossover</u> cable 2m
1622 5099 05 2 m	› Used to connect/download ComBox- E
2908 0092 00 1,8 m	›

USB to Ethernet download tool (Obsolete)



PART NUMBER:	DESCRIPTION:
2908 0135 00	› Ethernet link: to be used together with crossover patch cable (1622 5756 00)

USB to Ethernet download tool



PART NUMBER:	DESCRIPTION:
1630 0492 00	› Ethernet link: to be used together with crossover patch cable (1622 5756 00)
	› 1-Port RJ45 networking adapter
	› Compatible with Windows XP 32bit
	› Windows XP 64bit
	› Windows Vista 32bit/64bit
	› Windows 7 32bit/64bit
	› Windows 8 32bit/64bit
	› Windows 8.1 32bit/64bit
	› Compliant with 10/100Mbps networks
	› Compliant with USB 2.0 specifications

Supports for Elektronikon MkIV and Mk5



PART NUMBER:

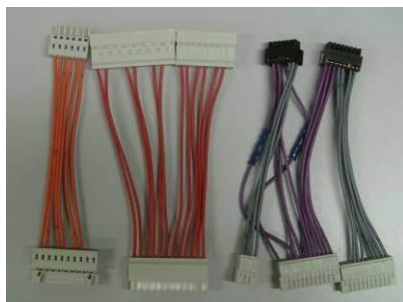
1630 0765 80
1630 0765 00

DESCRIPTION:

- › One pair of supports to be mounted on any MkIV/Mk5 controller.
- › Easy and cheap solution for desk setup in the office or even for trainings.
- › To be used together with test kits.
- › Separate supply needed

10.2. Mk5 Tools

MkIV Elektronikon2 to Mk5 adaptor cables



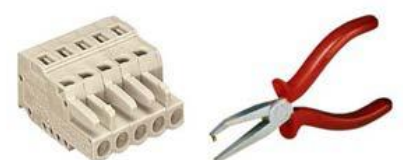
PART NUMBER:

1630 0028 01

DESCRIPTION:

- › MkIV Elektronikon 2 to Mk5 Basic & Graphic
- › Straight connections for simulator tools

Plier tool Grey WAGO connector



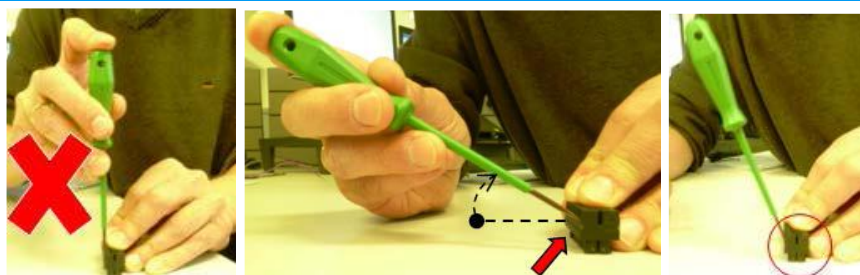
PART NUMBER:

2908 0093 00

DESCRIPTION:

- › Wiring tool for grey WAGO cage clamp connectors

Tool Black WAGO connector



PART NUMBER:

-

DESCRIPTION:

- › 2,5x0,4mm flat screw driver
- › Or order operating tool, No.210-719, online from WAGO:
<http://www.wagocatalog.com>

Mk5 TESTkit



ITEM NAME:

Testkit Mk5 Standard & Graphic

PART NUMBER:

1630 0148 00

DESCRIPTION:

- › Little pcb's to simulate I/O inputs, used for failure diagnostics
- › User instruction (9845 0039 00)



ITEM NAME:
Testkit Mk5 Graphic+

PART NUMBER:
1630 0149 00

DESCRIPTION:

- › Little pcb's to simulate I/O2 inputs and connect Graphic+, used for failure diagnostics
- › User instruction (9845 0039 00)

PART NUMBER:
1630 0651 00

Testkit for IO 3-4

Mk5/MkIV Simulator box



PART NUMBER:
2230 5200 04

DESCRIPTION:

- › Used to verify the functionality and settings of MkIV or Mk5 modules
- › Used to simulate I/O inputs and to train on the functionality of MkIV or Mk5 modules
- › Can be used for all Mk5 Basic & Graphic and MkIV A & B modules of all different brands
- › Be aware that this simulator does not include the actual module. The module needs to be purchased separately
- › Delivered in a hard case

10.3. MkIV Tools

MkIV USB-to-CAN Download kit



KIT NUMBER:
1630 1327 00

CONTENT:
USB to CAN conversion
CAN cable
RS 232C cable
Installation manual
No separate power necessary

DESCRIPTION:

- › Complete kit to enable the transfer of data and files between a PC and the CAN network
- › Better alternative for (2903 0003 01)
- › The USB to CAN interface can be used for downloading information into the Elektronikon MkIV regulators with the FDP+ program and to read-out/program information and parameters with the FSP+ program
Logging program FLP+

MkIV Serial-to-CAN Download kit



KIT NUMBER:
2903 0003 01

CONTENT:
S2CAN box
Power supply cable
CAN cable
RS 232C cable

DESCRIPTION:

- › Complete kit to enable the transfer of data and files between a PC equipped with a serial connection (and not USB) and the CAN network

MkIV Intermediate CAN connector

**PART NUMBER:**

1089 9543 05

DESCRIPTION:

- › Used between a CAN service connector and a PC to ensure reliable data transmission

Plier WAGO connector

**PART NUMBER:**

2908 0093 00

DESCRIPTION:

- › Wiring tool for WAGO cage clamp connectors

MkIV controller test kit

**KIT NUMBER:**

2903 0137 80

CONTENT:

2903 0137 02 MkIV Elektronikon I
2903 0137 00 MkIV Elektronikon II
2903 0137 01 MkIV Elektronikon III
9820 2000 02 User instruction

DESCRIPTION:

- › Contains 3 Field test tools for failure diagnostics on MkIV Elektronikon I, II and III controllers

Airlogic Simulator box

**PART NUMBER:**

2200 9404 51

DESCRIPTION:

- › Used to verify the functionality and settings of Airlogic
- › Used to simulate I/O inputs and to train on the functionality of MkIV modules (MkIV modules can be replaced)
- › Delivered in a hard case

10.4. Mk3/MkIV Tools

Mk3 Basic Simulator

**PART NUMBER:**

1613 6845 01

DESCRIPTION:

- › Used to verify the functionality and settings of Mk3 modules
- › Be aware that this basic simulator only handles a module on its own, no support modules

Mk3 Full feature simulator

**ITEM NAME:**

Mk3 Full feature simulator

PART NUMBER:

1613 6845 00

DESCRIPTION:

- › Used to verify the functionality and settings of Mk3 modules, including the support modules

MkIV adapter sets

ITEM NAME:

MkIV Adapter sets

PART NUMBER:

1613 9972 00	Mk3 LRR2 to MkIV Elektronikon I
1613 9973 00	Mk3 HRR3 to MkIV Elektronikon II
1613 9975 00	Mk3 HRR to MkIV Elektronikon III
1613 9977 00	MkIV Elektronikon I to MkIV Elektronikon I/II
1613 9978 00	Mk3 LRR to MkIV Elektronikon I

Mk3/MkIV VSD communication testbox

**KIT NUMBER:**

2903 0002 01

DESCRIPTION:

- › SLAD X COM2 Mk3
- › Frequency converter simulation kit, for testing and trouble shooting
- › Used for tracing communication faults in VSD converters
- › To be used with VSD simulation program from Lotus Notes software DB

10.5. Mk3 Tools

Mk3 SLAD cable

**PART NUMBER:**

2903 0002 00

DESCRIPTION:

- › Download interface box
- › Enables the connection of a PC to a Mk3 controller over RS232

Mk3 SLAD cable

**PART NUMBER:**

2903 0003 00

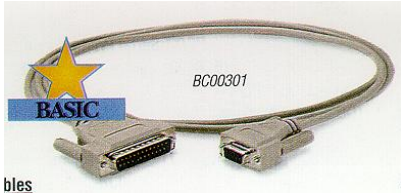
CONTENT:

Cable
Connector

DESCRIPTION:

- › PC to SLAD interface box connection cable
- › Serial cable for download (2m)

Mk3 Serial connection cable

**PART NUMBER:**

2908 0086 00

DESCRIPTION:

- › Used to set up a 9-pole <-> 25-pole serial connection (point to point).
- › This cable is used for connecting a Mk1, Mk2 or Mk3 (COM1) module to a laptop or PC, via the serial port.

10.6. Non-Elektronikon Tools

ES3000 Simulator

**PART NUMBER:**

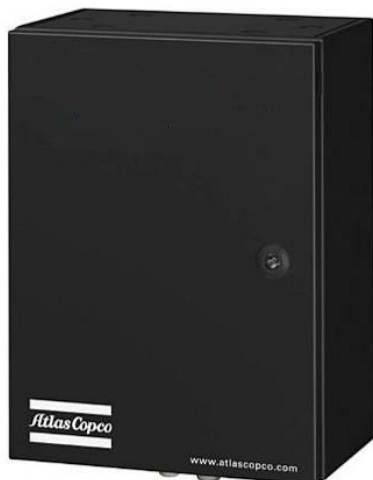
2200 9404 50

DESCRIPTION:

- › Used to verify the functionality and settings of ES3000
- › Used to simulate I/O inputs and to train on the functionality of ES3000 controller
- › Delivered in a hard case

10.7. Connectivity tools & Accessories

Connectivity cabinet

**PART NUMBER:**

2230 0088 00

DESCRIPTION:

24VDC power supply
230VAC to 24VAC power converter
DIN rail to fit communication devices
(COMBOX's / SMARTBOXes, Mk5
Gateway, DIGI, SMART2LAN...)
Communication devices not included!

Ethernet Switch – for Mk5 networking

**PART NUMBER:**

1089 9620 22

DESCRIPTION:Unmanaged Ethernet Switch 8 ports
24V AC, DIN rail mountable

24Vdc power supply 60 Watt – can be used for SMART2LAN

**PART NUMBER:**

1089 9407 15

DESCRIPTION:

Power supply from Siemens: 6EP1332-1SH43.

USB to RS485/RS422 conversion DIN rail mounted

**KIT NUMBER:**

3001 5022 00

CONTENT:

2230 1022 05

Module USB adapter

1630 1360 00

Cable RS485

DESCRIPTION:

- › Complete with USB and RS485 cable
- › Instructions => Installation Guide_3001 5022 00 USB to RS485 interface
- › + Used to simulate Modbus communication
- › + Used for tracing communication faults in VSD converters
- › + To be used with VSD simulation program from Lotus Notes software DB
- › Metal housing
- › Optical isolated

USB to RS485 conversion (old)

**KIT NUMBER:**

2901 1792 00

CONTENT:

1900 0711 17

Module USB adaptor

1622 5473 00

Cable RS485

9820 5491 00

Instruction jumpers

DESCRIPTION:

- › Complete with installation CD-ROM and cables
- › Used for tracing communication faults in VSD converters
- › To be used with VSD simulation program from Lotus Notes software DB

USB to RS232 conversion DIN rail mounted

**KIT NUMBER:**

1089 9492 01

DESCRIPTION:

- › DIN rail mounted adapter USB to RS232.
- › One Port
- › To be used for new generation of laptops without RS232 gate
- › + required to simulate Profibus communication
- › Metal housing
- › Optical isolated

Profibus DP Master simulator + hardware convertor

**PART NUMBER:**

2903 0004 02

DESCRIPTION:

- › Includes interface RS232/Profibus (Bihl & Wiedemann)
- › For simulation of Profibus communication (Profibus DP master simulation)
- › Extra training might be required

RS485/RS232 interface (old)

**PART NUMBER:**

1900 0711 25

DESCRIPTION:

- › RS485/RS232 conversion to insert between Elektronikon (2x2) and VSD (Simover P)
- › Used to connect MkIV controllers (RS485) to first generation VSD invertors, which communicated over RS232

RELATED ITEMS:

- › GA 30-90 VSD Mk3 to MkIV B
- › GA 30-90 VSD Mk3 to MkIV B HR

11. Connections

11.1. MkIV/Mk5 CANbus

CAN connector (regular)

**PART NUMBER:**

1088 0017 28

DESCRIPTION:

- › Standard CAN connector
- › Used to connect Elektronikon unit controllers, Connectivity products and ES products to the CAN network
- › Includes a terminating resistor with on/off selector

CAN Service connector

**PART NUMBER:**

1088 0017 27

DESCRIPTION:

- › Service CAN connector
- › Includes a port to connect a PC into the CAN network
- › Includes a terminating resistor with on/off selector
- › Max. 30 compressors on 1 data network called LAN

CAN cable



PART NUMBER:
1630 1432 00
1900 0707 92 (Obsolete)

DESCRIPTION:

- › CAN cable sold per reel (1000 Feet / 305 meter)
- › Brand: Belden 3106a_E34972
- › 3 conductors 1+ 1 twisted pair
22 AWG stranded tinned copper
Overall Beldfoil shield plus a tinned copper braid
- › Cable 1 – White/Orange Stripe
Cable 2 – Orange/White Stripe
Cable 3 – Blue/White Stripe
- › Overall Nom.Diameter: 7.620 mm

CAN cable (per meter)



PART NUMBER:
0995 5210 42
0017 2610 13 (Obsolete)

DESCRIPTION:

- › CAN cable sold per meter
- › Brand: Belden 3106a_E34972

CAN cable

PART NUMBER:
1622 5676 30 2 m

DESCRIPTION:

- › CAN cable with moulded connectors without any end resistors

CAN repeater



KIT NUMBER:
8030 1030 20
CONTENT:
1089 9543 01

DESCRIPTION:

- › Acts as a signal booster (amplification)
- › Allows network length to exceed 250m up to 500m max
- › Brand IXXAT

CAN bridge



PART NUMBER:
1089 9543 03

DESCRIPTION:

- › DIN rail mounted CAN bridge
- › Tool (IXXAT) typically used to link 2 different CAN networks together and allows to filter/convert CAN protocol
- › Can also be used as CAN repeater. Required when CAN repeater is not sufficient (distance >400m). It is not allowed to use 2 CAN repeaters in the same network (CAN bridge required in between)
- › Active device (better amplifier and more intelligent than repeater)

CAN to Ethernet



PART NUMBER:
1089 9543 07 Generic

DESCRIPTION:

- › DIN rail mounted interface which converts Ethernet and CAN
- › Tool (IXXAT) used to link 2 different CAN networks together over Ethernet cable
- › Allows flexible access from PC to CAN via Ethernet
- › Does not allow connection to Ethernet network
- › Mainly used for CRC

CAN to fiber



PART NUMBER:
1089 9543 09

DESCRIPTION:

- › DIN rail mounted interface which converts fiber and CAN
- › Supports only multi-fiber

CAN power supply 24VDC



PART NUMBER:
1089 0457 73

DESCRIPTION:

- › DIN rail mounted 24VDC power supply for CAN repeater
- › OMRON S82K-00324
- › 100..240V/24VDC 50/60Hz; 3W
- › Can also be used for transmitters supply

PART NUMBER:
1089 0457 74

DESCRIPTION:

- › DIN rail mounted 24VDC power supply for CAN repeater
- › OMRON S82K-03024
- › 100..240V/24VDC 50/60Hz; 30W – 1,3A

Shielding carrier



PART NUMBER:
1088 0034 02

DESCRIPTION:

- › Used with 2 clamping saddles to mount CAN cables on a DIN rail for connection to a repeater or bridge
- › WAGO: REF. 790-114

Shielding clamping saddle

**PART NUMBER:**

1088 0034 01

DESCRIPTION:

- › Used in junction with a shielding carrier to mount CAN cables on a DIN rail for connection to a repeater or bridge
- › WAGO: REF. 790-108

CAN kit

**ITEM NAME:**

CAN kit 2 machines (50m cable)

KIT NUMBER:

8092 2840 85

DESCRIPTION:

- › 50m CAN cable
- › 3x CAN connectors (regular)
- › 1x service CAN connector
- › 1x intermediate connector
- › 1x instruction booklet

**ITEM NAME:**

CAN kit 3 machines (75m cable)

KIT NUMBER:

8092 2840 93

DESCRIPTION:

- › 75m CAN cable
- › 4x CAN connectors (regular)
- › 1x service CAN connector
- › 1x intermediate connector
- › 1x instruction booklet

ITEM NAME:

CAN kit 4 machines (100m cable)

KIT NUMBER:

8092 2841 01

DESCRIPTION:

- › 100m CAN cable
- › 5x CAN connectors (regular)
- › 1x service CAN connector
- › 1x intermediate connector
- › 1x instruction booklet

ITEM NAME:

CAN kit 6 machines (150m cable)

KIT NUMBER:

8092 2841 19

DESCRIPTION:

- › 150m CAN cable
- › 7x CAN connectors (regular)
- › 1x service CAN connector
- › 1x intermediate connector
- › 1x instruction booklet

ITEM NAME:

CAN kit 8 machines (200m cable)

KIT NUMBER:

8092 2841 27

DESCRIPTION:

- › 200m CAN cable
- › 9x CAN connectors (regular)
- › 1x service CAN connector
- › 1x intermediate connector
- › 1x instruction booklet

CAN-to-CAN cable

**PART NUMBER:**

1622 0676 10 400 mm
1622 0676 00 1000 mm

DESCRIPTION:

- › CAN cable with connectors included and fitted
- › Can messages between 2 CAN systems via TCP/IP

CAN-to-CAN + connectors

PART NUMBER:

1622 1717 10

DESCRIPTION:

› 1m CAN cable + 2x CAN service connector

CAN installation guide

**PART NUMBER:**

9820 3582 00

DESCRIPTION:

A complete description on how to install a CAN network

12. Connectors, sensors and cables

12.1. Pressure transmitters



Pressure transmitter

DESCRIPTION:

- › Measurement of pressures
- › Pressure sensing over a longer distance up to 1000m
- › Supply 10-30VDC
- › Output 4..20mA

PART NUMBER:

1089 0492 50

DESCRIPTION:

- › Measurement of pressures between 0 and 4 bar(g) (58 psig)

PART NUMBER:

1089 0492 54

DESCRIPTION:

- › Measurement of pressures between 0 and 6 bar(g) (87 psig)

PART NUMBER:

1089 0492 51

DESCRIPTION:

- › Measurement of pressures between 0 and 10 bar(g) (145 psig)

PART NUMBER:

1089 0492 52

DESCRIPTION:

- › Measurement of pressures between 0 and 16 bar(g) (232 psig)

PART NUMBER:

1089 0492 53

DESCRIPTION:

- › Measurement of pressures between 0 and 60 bar(g) (870 psig)

12.2. Pressure transducers

Pressure transducer JUMO

DESCRIPTION:

- › Measurement of pressures
- › 0,5-4,5V

PART NUMBER:

1089 9625 12

DESCRIPTION:

- › Measurement of pressures between -1 and 5 bar rel (-14,5 and 72,5 psi g)

PART NUMBER:

1089 9625 13

DESCRIPTION:

- › Measurement of pressures between -1 and 17 bar rel (-14,5 and 246,67 psi g)

PART NUMBER:

1089 9625 14

DESCRIPTION:

- › Measurement of pressures between -1 and 10 bar rel (-14,5 and 145 psi g)

PART NUMBER:

1089 9625 15

DESCRIPTION:

- › Measurement of pressures between 0 and 3 bar rel (0 and 43,5 psi g)

PART NUMBER:

1089 9625 16

DESCRIPTION:

- › Measurement of pressures between 0 and 17 bar rel (0 and 246,6 psi g)

PART NUMBER:

1089 9625 17

DESCRIPTION:

- › Measurement of pressures between 0 and 25 bar rel (0 and 363 psi g)

PART NUMBER: 1089 9625 18	DESCRIPTION: › Measurement of pressures between -172 and +172 mbar rel (-2,5 and +2,5 psi g)
PART NUMBER: 1089 9625 19	DESCRIPTION: › Measurement of pressures between -1 and 5bar rel (-14,5 and 72,5 psi g)



Pressure transducer

DESCRIPTION:
› Measurement of pressures
› 0-5V

PART NUMBER: 1089 0575 09	DESCRIPTION: › Measurement of pressures between -1 and 1 bar(g) (-14.5 and 14.5 psig)
PART NUMBER: 1089 0575 55	DESCRIPTION: › Measurement of pressures between 0 and 5 bar(g) (-14.5 and 73 psig)
PART NUMBER: 1089 0575 60	DESCRIPTION: › Measurement of pressures between -1 and 5 bar(g) (-14.5 and 73 psig)
PART NUMBER: 1089 0575 54	DESCRIPTION: › Measurement of pressures between 0 and 17 bar(g) (247 psig)
PART NUMBER: 1089 0575 65	DESCRIPTION: › Measurement of pressures between 0 and 17 bar(g) (247 psig)
PART NUMBER: 1089 9579 55	DESCRIPTION: › Measurement of pressures between 0 and 35 bar(g) (508 psig)
PART NUMBER: 1089 0575 58	DESCRIPTION: › Measurement of pressures between 0 and 35 bar(g) (508 psig)
PART NUMBER: 1089 0575 56	DESCRIPTION: › Measurement of pressures between -172 and 172 mbar(g) (-2.5 and 2.5 psig)
PART NUMBER: 1089 0575 73	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)
PART NUMBER: 1089 0575 74	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)
PART NUMBER: 1089 0575 78	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)

PART NUMBER: 1089 9625 34	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)
PART NUMBER: 1089 9625 35	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)
PART NUMBER: 1089 9625 36	DESCRIPTION: › Measurement of pressures between ? and ? mbar(g) (? and ? psig)

12.3. WAGO connectors

WAGO connectors Mk5

ITEM NAME: Connector 2x27 & 4x29	DESCRIPTION: › WAGO 713-1108 – female 2x8 pole › Used for Standard, Graphic, Graphic+ & IO34
PART NUMBER: 1088 0037 81	
ITEM NAME: Connector 2x28	DESCRIPTION: › WAGO 713-1107 – female › Used for Graphic
PART NUMBER: 1088 0037 80	
ITEM NAME: Connector 2x30	DESCRIPTION: › WAGO 721-112/026-000 – female › Used for Standard & Graphic
PART NUMBER: 1088 0031 32	
ITEM NAME: Connector 3x30	DESCRIPTION: › WAGO 721-112/026-000 – female 12 pole › Used for IO2
PART NUMBER: 1088 0031 32	
ITEM NAME: Connector 3x31	DESCRIPTION: › WAGO 721-206/026-000 – female 6 pole › Used for IO2
PART NUMBER: 1088 0031 46	
ITEM NAME: Connector 3x32	DESCRIPTION: › WAGO 721-114/026-000 – female 14 pole › Used for IO2
PART NUMBER: 1088 0031 34	
ITEM NAME: Connector 3x33 & 4x33	DESCRIPTION: › WAGO 713-1110 – female 2x10 pole › Used for IO2 & IO34
PART NUMBER: 1088 0037 83	
ITEM NAME: Connector 3x34 & 4x34	DESCRIPTION: › WAGO 713-1109 – female 2x9 pole › Used for IO2 & IO34
PART NUMBER: 1088 0037 82	
ITEM NAME: Connector 3x35 & 3x35	DESCRIPTION: › WAGO 713-1112 – female 2x12 pole › Used for IO2 & IO34
PART NUMBER: 1088 0037 84	

WAGO connectors MkIV Elektronikon II

PART NUMBER: 1088 0031 12	DESCRIPTION: › 12-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 13	DESCRIPTION: › 13-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 49	DESCRIPTION: › 9-pole › Pin spacing 7,5mm
PART NUMBER: 1088 0031 29	DESCRIPTION: › 9-pole › Pin spacing 5mm
PART NUMBER: 1088 0031 30	DESCRIPTION: › 10-pole › Pin spacing 5mm

WAGO connectors MkIV Elektronikon III

PART NUMBER: 1088 0031 02	DESCRIPTION: › 2-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 04	DESCRIPTION: › 4-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 06	DESCRIPTION: › 6-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 10	DESCRIPTION: › 10-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 12	DESCRIPTION: › 12-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 13	DESCRIPTION: › 13-pole › Pin spacing 3,5mm
PART NUMBER: 1088 0031 29	DESCRIPTION: › 9-pole › Pin spacing 5mm
PART NUMBER: 1088 0031 30	DESCRIPTION: › 10-pole › Pin spacing 5mm
PART NUMBER: 1088 0031 49	DESCRIPTION: › 9-pole › Pin spacing 7,5mm

12.4. T-sensor cables

T-sensor cable Water Cooled

PART NUMBER:	DESCRIPTION:
1622 0662 00	› Temperature sensor cable for water cooled versions

T-sensor cable Energy Recovery

PART NUMBER:	DESCRIPTION:
1622 0663 01 L=3400 mm	› Temperature sensor cable for Energy
1622 0663 02 L=4000 mm	Recovery

13. Central controllers

13.1. ES4i

ES4i Kit for Mk5

KIT NUMBER / PART NUMBER:	DESCRIPTION:
1630 0100 00 CTS PGC 00AB	› ES4i license kit for Mk5 Graphic (+) controller
	› Supports up to 4 compressors (max 1 VSD)

ES4i Hardware Key MkIV



KIT NUMBER / PART NUMBER:	DESCRIPTION:
8092 2482 62 CTS PGC 00AB	› Hardware dongle which activates the ES 4i multi compressor controller, which is built into all MkIV controllers. The ES 4i can control up to 4 machines, 1 of which can be a VSD

ES4i Hardware Key Kit MkIV



KIT NUMBER:	DESCRIPTION:
8092 2822 04 CTS PGC 00AB	› Hardware key
	› Makes a 4x sequencer from an Elektronikon controller
	› Can control up to 4 machines, only 1 can be a VSD
CONTENT:	
1900 0711 32 Hardware key	
1622 0661 02 Cable 150mm	

ES4i Instruction manual MkIV

PART NUMBER:
2920 1470 01

ES4i Simulation box



PART NUMBER:

2903 0004 01

DESCRIPTION:

- › 4x MkIV Elektronikon II modules in a CAN network pre-programmed as 3x fixed speed GA and 1x GAVSD
- › VSD communication textbox 2903 0002 01 allows to connect to PC and simulate VSD control
- › 1x dongle on ES4i Master
- › 1x AIE1
- › Power supply 230/24V
- › I/O simulation by toggle switches & Multi-Turn Potentiometers

13.2. ES6

ES6 Mk5 Central Controller



PART NUMBER:

8092 2928 15 ES6 IEC
 CTS PGC ONAB
 8092 2928 23 ES6 CSA/UL
 CTS PGC ONAB
 2946 9537 xx AirOptimizer kits.xls for all options

SPARE PARTS

1900 5200 22 Mk5 Graphic plus
 1900 5200 32 Mk5 IO2 Module

DESCRIPTION:

- ES6 Mk5
- › Pre-installed non-expiring license pressure transmitter 0-16 bar
 - › Controls up to 6 machines. Maximum 6 VSD's
 - › Connectivity is possible via both CAN network and digital IO

ES6 Mk5 Instruction manual

PART NUMBER:

2920 7094 70

ES 6 MkIV Central Controller



PART NUMBER:

8092 2854 70 CTS PGC ONAB
 8092 2883 34 All PGC 46V6

AIF compressors, also need :

8092 2482 62 Hardware key CTS
 8092 2883 26 Hardware key All

SPARE PARTS

1900 0712 81 MkIV Master module
 19000711 62 DIOE module

DESCRIPTION:

- › Wall mounted central controller which can control up to 6 machines, all of which can be a VSD. Connectivity is possible via both the CAN network and digital I/O

ES6 MkIV Instruction manual

PART NUMBER:

2920 7007 00

13.3. ES6i / ES6 Mk5

ES6i / ES6 License Mk5

PART NUMBER:			DESCRIPTION:
1630 0103 00	CTS	PGC 00AB	› ES6i License kit for Mk5 Graphic (+) controller
			› Supports up to 6 compressors (max 6 VSD)
			› Same license for ES6 and ES6i

13.4. ES8

ES 8 – 50Hz & 60Hz – IEC/CE & CSA/UL Approval



SPARE PARTS		DESCRIPTION:
1900 0711 81	ES8 control panel no IO card	› Central control unit for a maximum of 8 compressors, any number of which can be VSD. The product numbers below include a 0-16 bar(g)/232 psi(g) pressure sensor. Other configurations are possible via product connect › Maximum 8 machines connected › Maximum 8 MkIV machines
1900 0711 91	ES8 IO card	

ES8 Instruction manual

PART NUMBER:
2920 1597 00

13.5. ES16

ES16



PART NUMBER:		DESCRIPTION:
2230 0066 10	ES16 basic kit PGC 00AA	› Central controller for control of 1 airnet and max. 16 machines. › CAN network only
2946 9537 xx	AirOptimizer kits.xls for all options	
ES16 Licenses:		KIT CONTENT:
1630 0607 00	AirOptimizer 1 year PGC 00AD	› ES16 › Mounting brackets › Standard IO block – 2AI › Compact flash card › USB stick with instruction manual
1630 0608 00	Control+ 1 year PGC 00AC	
	non expiring PGC 00AB	

1630 0609 00	screw Control license (one-off)
1630 0610	turbo Control license (one-off)
SPARE PARTS	
1089 9405 17	Panel PC
1623 8635 00	Standard IO block 2AI
1623 4027 00	Extended IO block 8AI4DI4DO

13.6. ES130

ES130



SPARE PARTS		›
1900 0707 71	Panel PC	

13.7. ES360

ES360



PART NUMBER:		DESCRIPTION:
2230 0360 80	ES360 basic kit PGC 00AB	› Central controller for max. of 3 airnets and max. 60 machines
2946 9537 xx	AirOptimizer kits.xls for all options	› CAN network only › Max 30 compressors and 30 dryers
ES360 Licenses:		KIT CONTENT:
1630 0113 00	AirOptimizer 1 year PGC 00AD	› ES360
1630 0112 00	Control+ 1 year PGC 00AC	› Mounting brackets
1630 0611 00	After Control+ Non-Expiring PGC 00AB	› Compact flash card › CD-ROM with instruction manual
SPARE PARTS		
1623 4418 00	ThinkIO module	
1089 9559 02	Touch panel	
1623 4027 00	IO module 8AI4DI4DO	
1623 4028 00	IO module 16DI16DO	

13.8. ES interfaces

ES002

KIT NUMBER / PART NUMBER:	DESCRIPTION:
	› Interface between Elektro/Pneumatic (EPN) and ES systems
	› Replaced by CANBox

KIT NUMBER / PART NUMBER:

8104 0115 91 / 8190 2102 02

DESCRIPTION:

- › Replaced by CANBox
- › Identical to ES002 with integrated COMbox (1900 0711 41) for CAN to ES100 conversion

CANBox**ITEM NAME:**

CANbox

PART NUMBER:

1900 0712 61

DESCRIPTION:

- › DIN rail mounted CAN interface
- › Enables a non-Mk compressor to be connected to the CAN network

ITEM NAME:

CANbox Multibrand

PART NUMBER:

1900 0712 65

DESCRIPTION:

- › Special version for Multibrand

13.9. Multibrand central controllers**EControl6i Mk5****PART NUMBER:**

Xxxx xxxx xx
Contact AIM division for activation

DESCRIPTION:

- › EControl6i License for Mk5 Graphic (+) controller
- › Supports up to 6 compressors (max 6 VSD)

EControl6 Mk5 Central Controller**PART NUMBER:**

8092 2929 06 Worthington
8092 2929 14 Grassair
8092 2929 22 Quincy IEC
8092 2929 30 Alup
8092 2929 48 Agre
8092 2929 55 Ceccato
8092 2929 63 CP IEC
8092 2929 71 Creemers
8092 2929 89 Mark
8092 2929 97 Mauguire
8092 2930 03 Puska
8092 2930 11 Quincy UL

DESCRIPTION:

- › Wall mounted central controller which can control up to 6 compressors including 6 VSD's
- › Connectivity is possible via CAN or digital I/O

KIT CONTENT:

- › Cubicle with transformer
- › Mk5 controller with graphic display
- › Expansion module
- › Pressure transmitter

Multilogic – MkIV generation**KIT NUMBER / PART NUMBER:**

6219 0735 00 Multilogic kit
2 machines
6219 0736 00 Multilogic kit
4 machines

DESCRIPTION:

- › Hardware key that activates Multilogic functionality in an AIRlogic (Fixed speed or VSD)
- › Control from 2 to 4 compressors. Max. 1 VSD
- › Control of AIRlogic or Infologic

Multilogic box – MkIV generation



KIT NUMBER / PART NUMBER:

8092 2870 70 Multilogic box kit

SPARE PARTS

1900 0712 85 MkIV de-branded
6256 3125 00 Expansion module mix box

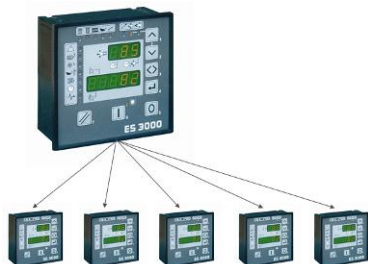
DESCRIPTION:

- › Wall mounted central controller which can control up to 6 compressors including 6 VSD's
- › Connectivity is possible via CAN or digital I/O

KIT CONTENT:

- › Cubicle with transformer
- › MkIV controller
- › Expansion module mix box
- › Pressure transmitter

ES3000 Networking



PART NUMBER:

4101 0001 10 For ES3000 2202 3602 75
4101 0001 11 For ES3000 2203 0135 01
4101 0001 12 For ES3000 2202 8420 11

DESCRIPTION:

- › Network key to control up to 6 units with ES3000.
- › Used on MB 7-90kW Oil Injected Screw Compressors
- › See SB CAI 0151 for further information (published on MBP)

MC2 Sequencing module fixed speed



PART NUMBER:

4101 0001 20

DESCRIPTION:

- › Used on MC2 controllers on Abac and Balma Oil Injected Screw Compressors
- › For sequencing up to 4 for fixed speed compressors over Canbus
- › Every MC2 needs 1 module

MC2 Sequencing module variable speed



PART NUMBER:

2236 1101 63

DESCRIPTION:

- › Used on MC2 controllers on Abac and Balma Oil Injected Screw Compressors
- › For sequencing up to 4 for variable speed compressors over Canbus
- › Every MC2 needs 1 module