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Quotation Number:	13404	Date:	22/04/2021
Job Number:	IN1271	Date:	16/12/2021

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ADDITIONAL:

Payment Terms:
 50% / 40% / 10%
Other: please specify

Penalty Clause Yes / No

Please specify: _____

Blue Book Completion:

Signed	<i>G. G. G. G. G.</i>	Date	<i>30/4/22</i>
Verified	<i>S. M. M. M. M.</i>	Date	<i>30/4/22</i>

Quotation

To: AB Analitica s.r.l. (GBP £)
 Via Svizzera, 16
 35127 Padova
 ITALY

VAT No. 02375470289

Quotation Date: 22/04/2021
Quotation Reference: 13404
Customer Ref: SIMLAB
Account Ref. ABA002
Quotation Validity: 22/07/2021

Quantity	Product Code	Product Description	Unit Price £	Discount £	Net Price £
AGENTS PRICES					
Customer: SIMLAB					
1	20602	Complete Sercon ABCA2 system High performance, high sample throughput IRMS for 13C breath tests. Including 240 place XYZ autosampler and gas box. Includes 70101-1 - ABCA2 spares kit - filament, copper gaskets, source tool kit, pump oil, 100 12 ml Exetainer vials, tubing and needle. Including Windows based PC and printer	49,000.00	4,900.00	44,100.00
1	SI1767	CVL505 - Barcode Reader Bar code reader for error free sample loading, secure patient identification and GLP compliance.	1,190.00	119.00	1,071.00
1	WARR	1 year warranty	0.00	0.00	0.00
1	INST	Installation and start up training at Customer's site - to be completed by AB Analitica	0.00	0.00	0.00
1	CIP	Estimated CIP - Destination Airport	1,500.00	0.00	1,500.00

This quotation is issued in Pound Sterling

Total Net Amount £ 46,671.00

Total VAT Amount £ 0.00

Order Total £ 46,671.00

* The price quoted does not include any local taxes or duties
 See separate document for terms and conditions

Payment Details:-

50% with order, 40% on delivery and 10% installation
 Payment is required within 30 DAYS of invoice date by bank transfer.
 All bank transfer charges are the responsibility of the customer.

Intra-community supply, subject to VAT in the country of acquisition.

Sercon Bank Details:-

National Westminster Bank, 36 High Street,
 Nantwich, Cheshire CW5 5GA U.K.

Sterling: IBAN: GB74NWBK54101736755133
 Euro: IBAN: GB14NWBK60721013806831
 US Dollar: IBAN: GB94NWBK60730113806556
 BIC: NWBKGB2LXXX



AB ANALITICA s.r.l.
Via Svizzera, 16 - 35127 PADOVA (Italy)
Tel. +39 049761698 - Fax +39 0498709510 - info@abanalitica.it
Registro Imprese di Padova C.F. e P.Iva 02375470289

Spett.le
SERCON LIMITED

Unit 3B Crewe Trade Park, Gateway
CREWE - CHESHIRE - REGNO UNITO

Telefono / Fax
+44 1270580008 +44 1270252310
sales@sercongroup.com

Cod. Forn. \ Cod. 1.152	IVA \ Vat EE	Valuta \ Currency STN	Codice fiscale \ Vat Code	Partita IVA \ Vat Code GB 771110074	Numero \ Number 1.411/00	Data \ Date 02/12/2021			
Descrizione pagamento \ Payment Terms Bonifico bancario 30gg data Fattura				Iban					
NON SI ACCETTANO CESSIONI DEL CREDITO				Ordine Fornitore \ Purchase Order					
Codice articolo Item		Descrizione \ Description		Pz. Conf. Pcs Pack	Quantità Qty	Prezzo Un. Unit Price	% Sc % Disc	Imp. Netto Total Price	IVA VAT
20602	Complete Sercon ABCA2 system	1	1	49.000,00	10,00	44.100,00	EE		
SI1767	CVL505 - Barcode Reader	1	1	1.190,00	10,00	1.071,00	EE		
WARR	1 year warranty								
INST	Installation and start up training at Customer's site								
CIP	SPESA DI TRASPORTO / FREIGHT COST Estimated CIP - Destination Airport	1	1	1.500,00		1.500,00	EE		
Orario Consegna \ Delivery Time Dalle ore 9.00 alle ore 12.30 e dalle 14.00 alle 17.00				Totale imponibile \ Total Price 46.671,00		Totale IVA \ Total VAT		TOTALE ORDINE \ TOTAL 46.671,00	
Consegna \ Delivery				Porto \ Shipment (Incoterms)					
Destinazione Mercè \ Send merchandise to AB ANALITICA S.r.l. Via Svizzera 16, 35127 Padova									
Firma per Autorizzazione \ Authorization Signature				Preventivo \ Ref. Quotation n: 20210422_Quotation 13404a SIMLAB					

RIV

CONTROLLO ACCETTAZIONE MERCE	Conforme per qualità e quantità	☐	Funzione
	Non Conforme (Non Conformità n°	☐	Firma
Data	Peso (Spedizioni dall'estero)		Nr. F-DDT del

3 - MACHINE SPECIFICATION

Client:	SIMLAB C/O: AB Analytica		
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Ref No.	Product Description	Required
HS2022 (continuous flow)		
20402/1	HS2022 Ref Gas + P Mag	
20402/2	HS2022 Ref Gas + E-Mag	
20402/3	HS2022 Ref Gas + Hd Collector + E-Mag	
20402/4	HS2022 Ref Gas + Hd Collector+E-Mag+Trap Loop	
20501	Hd Collector Assy	***
50101/2	Trapping Loop Assy	
70201-1	70201-1 Analyser spares kit – Included	
EA Units		
10202/11	iso-EArth	
10202/13	iso-EArth+	
10202/14	iso-Earth HT Furnace Upgrade	
10202/15	Iso-Earth (Without Autosampler)	
11802/1	Earth+PC	
11802/2	EArth+Clarity+PC	
70501-1	Consumables for C and N for Combustion Only	
70501-11	Simultaneous CNS Consumables Kit (approx. 10000 analysis)	
70501-3	Sample Prep Kit (Inc.)	
70501-4	GSL Combustion and Gas C & N Start Up Kit	
70501-5	Simultaneous NCS Consumables Kit	
70501-6	C&N Combustion Only Consumables Kit (approx. 5000 samples)	
70501-8	Simultaneous CNS Consumables Kit (approx. 5000 samples)	
70601-1	Sulphur Start Up Kit (Inc. with Sercon EA Systems)	
70601-2	Sulphur Consumables Kit for 1000 Samples	
70601-4	Sulphur Consumables Kit (approx. 5000 Samples)	
70801-2	Pyrolysis Consumables Kit-Low temp for Solids	
71701-1	Sub Microgram Nitrogen Analysis Start Up Kit	
SI2040	PN150 Pneumatic Autosampler with one no.50 pos, carousel	
SI2345	ME Micro Balance	
SI2737/A	Sercon 50 Position Autosampler Assy	
SI2789	Extra 50 Position Carousel	
SI2744	Automatic Liquid Sampler 15 Position	
SI2743	Liquid Sampler Mounting Plate	
Headspace Equilibration		
10202/10	XYZ Gas Sampling Control Box	
10302/1	Aqua System	
11103	µCarbs for CF	
11103-1	µCarbs for DI	
11601	200 Place Dual Heated Block 240 Volt	
11801	Sercon XYZ Gas Autosampler	
71107-1	CF oxygen-18 equilibration kit	
71107-2	DI Oxygen-18 Equilibration kit	
71201-1	CF deuterium equilibration kit	
71201-2	DI Deuterium Equilibration kit	
71801-1	WES-DI start up kit (Inc. with WES-DI)	
GC Units		
10402/2	Orchid module 1500C (Will run Hd 70901-1 C Spares Kit Inc)	
10901	Nitrogen Option (71301-1 N Spares kit Included)	
HP7890/1	Agilent 7890B GC System	
HP7890/2	Agilent 7890B GC with Auto Injector	
HP7890/3	Agilent 7890B GC + Auto Injector + 150 Vial Sample Tray	
SI2561	Nexis GC 2010 Plus	

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Ref No.	Product Description	Required
GC Units <i>continued</i>		
SI2564	Nexis GC-2030	
70901-3	GC Pyrolysis H and O Start Up Kit	
70901-4	GC Pyrolysis H Spares Kit	
70901-5	GC Combustion C Spares Kit (approx. 5000 samples)	
70901-6	GC Pyrolysis h Start Up Kit (approx. 5000 samples)	
71301-1	GC N Spares kit	
ABCA2 Units		
10502/1	ABCA2 Sercon XYZ Autosampler	
10602	ABCA2 Gas Box	
20602	Complete Sercon ABCA2 system	
20603	ABCA IR Analyser	Y
70101-1	ABCA2 spares kit (Inc. With ABCA2)	
70101-2	ABCA2 Spares Kit for AB Analytica Systems	Y
70101-3	ABCA2 Autosampler Upgrade Kit	
SI1767	CVL505 – Barcode Reader	Y
SC9973	13C Urea breath test kit for Helicobacter pylori infection	
SC9974	Helicobacter Test kit for children age 3-11 (45mg)	
Integra2 Units		
20802/4	Integra2	
70201-2	Integra2 analyser spares kit - Included	
70401-1	Integra-2 consumables (Inc. With Integra2)	
Trace Gas Systems		
10802/4	CryoPrep	
10802/5	Automated LN refiller	
10802/6	CryoFlex (TOC)	
10802/7	CryoGas	
10802/8	CryoFlex (LA)	
SI2533	Silicon Carbide Vertical Furnace	
SI2731	213nm Laser Ablation System	
SI2733	isoScell 100 sampler chamber	
71001-1	Cryoprep Spares Kit	
71001-5	CryoGas Consumables Kit	
TOC Units		
14001	Thermalox Environmental TOC-IRMS	
14002	Thermalox Environmental TOC-Standalone	
14003	Thermalox Environmental TOC-Standalone No Sampler	
SI2772	CO2 Detector, High sensitivity Option	
SI2773	NOx detector Option	
SI2774	Vacuum pump Option	
SI2775	Stirred Vial rack Option	
72101-1	TOC Start Up Kit	
72101-2	TOC Chem Pack	
72101-3	TOC & TN Instrument with heavy usage - one year	
72101-4	TOC only - economy holding	
GEO 20-22 (dual inlet)		
10702	GEO 20-22 Water Equilibration System (D & 18O)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	

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21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	
70301-1	GEO start up kit - Included	
70301-3E	Comprehensive GEO 20-22 spares kit for 5 years operation	
HT-EA		
11501/4	HT-EA (With Autosampler)	
11501/5	HT-EA With Liquid Option	
11501/6	HT-EA Stand Alone	
11501/7	HT-EA (Without Autosampler)	
SI2622	CTC PAL3-LSI-L-S	
SI2624	CTC PAL3-Kit-Standalone	
70801-1	Pyrolysis Consumables Kit-High Temp for Solids	
71501-1	HT-EA Pyrolysis Start Up kit O and H	
71501-2	HT-EA Pyrolysis Kit for Water injections	
71501-3	HT-EA Sensitivity Start Up Kit for O & H in small samples	
71501-4	HT-EA Sensitivity Consumables Kit for O & H in small samples	
71501-5	HT-EA Sensitivity Kit for O&H in Small Samples (5000 samples)	
71501-7	HT-EA Kit for Room Temp Equilibration	
71501-8	HT-EA Pyrolysis Kit for Water injections (approx. 1 year kit)	

Ref No.	Product Description	Required
Upgrades		
12101	Evacuation System ***	
12102	2 Ref Gas+ Dilutor Box ***	
20101	Standard Source Assy ***	
20102	HS Source Assy ***	
20301	Standard Collector Assy ***	
30202/1	System Control Upgrade (Pmag) installation not included	Edwards Or Pfeiffer
30202/2	System Controller Upgrade (Emag) installation not included	Edwards Or Pfeiffer
10202/7	Preparation PCB Upgrade	
30202/3	Hijack Box ***	
30302/4	nEXT85 Edwards Pumping System Upgrade Single - installation not included	
30302/5	nEXT85 Edwards Pumping System Upgrade Dual - installation not included	
30302/6	nEXT85 Edwards Pumping System Upgrade Triple- installation not included	
SI2542	ABCA2 Upgrade Kit	
CALLISTOW	Callisto software upgrade ***	
Specials		
11702	LC-I interface	
12202	Leco Interface Unit	
SI2320	Agilent 1260 Series Refractive Index Detection HPLC System	
71401-1	ABCA-G Start Up/Spares Kit	
71401-2	ABCA-G Equilibration Spares Kit - Room temp O only	
71401-3	ABCA-G Equilibration Spares Kit - Room Temp O & H	
71601-1	LC Interface Spares Kit	
ADDITIONS		
PC	Windows 7 based PC System with Callisto Software	Y
Printer	Printer	
INST1	Installation and start up training at customer's site by Sercon Engineer	
INST2	Installation and start up training at customer's site by Agents Engineer	AB Analitica
WARR	1 year warranty	Y
WARR2	2 year warranty	
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract - 1 year	

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SPECIFICATION REQUIREMENTS		
Voltage	230 Volts 50/60Hzs	Y
Plug Type	SI2510 3 Metre USA/Japan plug to IEC C 13	
	SI2511 2.5 Metre Australian plug to IEC C 13	
	SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	
	SI2523 3metre Schuko (Euro) Plug to IEC C13 Socket	Y
	SI2514 2.5 metre Chinese mains to IEC C13	
Pallet	Stamped for export heat treated for 30 min @ 56 °C	Y
	Complies with all Export Requirements	

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SPECIAL REQUIREMENTS (DETAILED SPECIFICATION)

AB Analitica will need training on latest software.

Approved by Sales: <i>G. J. Connor</i>	Date: 17/1/22
Approved by Tech.: <i>M. O. L.</i>	Date: 17/1/22

3 - MACHINE SPECIFICATION

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[illegible]

4 - LOG SHEET

Client:	SIMLAB C/O: AB Analytica		
Quotation Number:	13404	Date:	22/04/2021
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Date	Action Taken	By Whom
19/11/22	no collector working on flange	SM
①	Pump main switch led stays on	SM
②	Isolation valve (10) closed incorrectly moved to correct position on the orange block	SM
20/11/22	Vacuum staying at 8.2×10^{-8}	SM
③	Back out on collector pins made the vacuum jump to 1.3×10^{-3} !!!	
④	Heavy contamination Paul notified	SM/HR
⑤④	Air line piped wrong	HR
⑥⑤	Perma pure dryer failed	HR
⑦⑥	faulty gage	HR
26/11/22	All crimps and flow set	SM
27/11/22	when valve switched over the flow drops to zero find leak on the loop ferrule not tight	
	CO2 Peak Shape achieved + Stability, looks good	
	US Crimped down to achieve $1.29-1.30 \times 10^{-7}$	SM.
	Ref gas Precision ran 0.02%✓	SM
	New Sampler now connected ready to test	

Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6YY, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

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[illegible]

4 - LOG SHEET

Client:	SIMLAB C/O: AB Analytica		
Quotation Number:	13404	Date:	22/04/2021
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Date	Action Taken	By Whom
28/1/22	Breath Precision is poor even after a return not sure if the sample is correct . the issue 5% put on to see if that points to N2 issue or moisture removal problem	SM
	5% CO2 also out of specification	SM
	Brought the ref closer to the sample size and breath precision is	
	0.08‰ ✓	SM
	ref gas re-run 0.04‰ ✓	SM
	5% put on	
	0.09‰ ✓	SM
	linearity put on poor result	
31/1/22	retuned source + DH Adjusted mag pos	SM
	linearity 0.27‰ ✓	SM
1/2/22	Breath Precision re-run 0.07 ✓	SM
	Peak ✓	
	ref gas precision re-run 0.05 ✓	SM
	5% Precision batch ~ 0.01 ✓	SM
	Sense 1.80 E-08 ✓ Trap 150	SM

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[illegible]

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Crewe, Cheshire CW1 6YY, UK
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[illegible]

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[illegible]

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[illegible]

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[illegible]

1/16 & 1/32 DIN TEMPERATURE CONTROLLER MANUAL (59423-6)

MECHANICAL INSTALLATION

The Controllers are designed to be mounted either in a 1/16 or a 1/32 DIN panel cutout. The units are sleeve mounted with the front bezel assembly rated NEMA4/IP66 provided that:

- the panel is smooth and the panel cutout is accurate;
- the mounting instructions are carefully followed.

DIN PANEL CUTOUT

1/16 DIN: 45.0mm +0.6 / 0.0 wide, 45.0mm +0.6 / 0.0 high
Maximum panel thickness 9.5mm
Minimum spacing 20mm vertical, 10mm horizontal

MOUNTING

To mount a Controller proceed as follows:

- 1 Check that the controller is correctly orientated and then slide the unit into the cutout.
- 2 Slide the panel clamp over the controller sleeve pressing it firmly against the panel until the controller is held firmly.
- 3 The controller front bezel and circuit board assembly can be unplugged from the sleeve. Grasp the bezel firmly by the recesses on each side and pull. A screwdriver can be used as a lever if required.
- 4 When refitting the bezel assembly it is important to press it firmly into the sleeve until the latch clicks in order to compress the gasket and seal to NEMA4/IP66.

CLEANING

Wipe down with damp cloth (water only)

Note: The controller should be isolated before removing or refitting it in the sleeve, and electrostatic precautions should be observed when handling the controller outside the sleeve.

DIMENSIONS: MODELS

Model	Bezel*		Behind panel		Overall length	Behind panel length*
	Width	Height	Width	Height		
1/32 DIN - 48 x 24mm	51.0	28.5	44.8	22.0	116.2	105.7
1/16 DIN - 48 x 48mm	51.0	51.0	44.8	44.8	116.2	105.7

Dimensions in mm
* includes gasket

ELECTRICAL INSTALLATION

(Also see important Safety Information)

OUTPUT DEVICES

Two of the following output devices are fitted to the controllers, depending on the model.

- 1 Solid state relay drive (SSd/SSd1/SSd2) 5Vdc +0/-15%, 15mA non isolating. To switch a remote SSR (or logic)
- 2 Miniature power relay (rL/rLY1) 2A/250V AC resistive, Form A/SPST contacts.
- 3 Sub miniature power relay (rLY2) 1A/250V AC resistive, Form A/SPST contacts.

OUTPUT DEVICE ALLOCATION

Any of the available outputs may be chosen for the main setpoint (SP1), the remaining device being automatically allocated to the second setpoint (SP2).

Dual relay or dual SSd output models are available to order. Please contact your local distributor for details.

Designed for use with the following supply voltages:

1. 100 - 240V 50-60 Hz 4.5 VA (nominal) +/-10% maximum permitted fluctuation
2. 12V - 24V (AC/DC) +/-20% 4.5 VA Polarity not required

The supply voltage is dependant on the specific model, check the product label to establish the correct voltage for the unit.

WIRING THE CONNECTOR

Prepare the cable carefully, remove a maximum of 8mm insulation and ideally tin to avoid bridging. Prevent excessive cable strain. Maximum recommended wire size: 32/0.2mm 1.0mm² (18AWG).

INDUCTIVE LOADS

To prolong relay contact life and suppress interference it is recommended engineering practice to fit a snubber (0.1uF/100 ohms) between terminals 5 and 6.

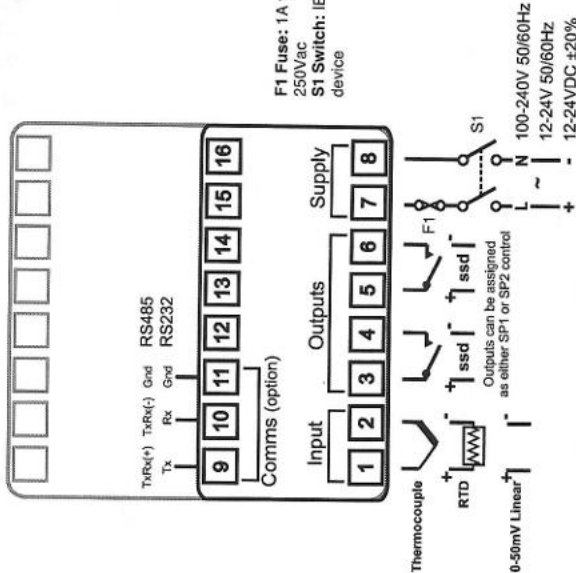
CAUTION: Snubber leakage current can cause some electro-mechanical devices to be held ON.

Check with the manufacturers specifications.

EN61010 - /CSA 22.2 No 1010, 1 92

- Compliance shall not be impaired when fitted to the final installation.
- Designed to offer a minimum of Basic Insulation only.
- The body responsible for the installation is to ensure that supplementary insulation suitable for Installation Category II or III is achieved when fully installed.
- To avoid possible hazards, accessible conductive parts of the final installation should be protectively earthed in accordance with EN6010 for Class 1 Equipment.

CONNECTION DIAGRAM



F1 Fuse: 1A time lag type to IEC127, CSA/UL rating 250Vac
S1 Switch: IEC/CSA/UL Approved disconnecting device

SAFETY INFORMATION

INSTALLATION

Designed for use:

UL873 - only in products where the acceptability is determined by Underwriters Laboratories Inc.

EN61010-1 / CSA 22.2 No 1010.1 - 92

To offer a minimum of Basic Insulation only.

Suitable for installation within Category II and III and Pollution Degree 2.

SEE ELECTRICAL INSTALLATION It is the responsibility of the installation engineer to ensure this equipment is installed as specified in this manual and is in compliance with appropriate wiring regulations.

Field wiring must be rated for a minimum of 70 deg C

CONFIGURATION

All functions are front selectable, it is the responsibility of the installing engineer to ensure that the configuration is safe. Use the program lock to protect critical functions from tampering.

ULTIMATE SAFETY ALARMS

Do not use SP2 as the sole alarm where personal injury or damage may be caused by equipment failure.

INSTRUMENT PANEL FEATURES



Green Display: Process temperature or program Function/Option
Orange Display: Setpoint temperature or program Option (Dual Display only)

Green LED: Setpoint 1 output indicator

Red/Orange LED: Setpoint 2 output indicator

ADJUSTMENTS

- To enter or exit program mode: Press **▲ ▼** together for 3 seconds
- To scroll through functions: Press **▲** or **▼**
- To change levels or options: Press **★ ▲** together or **★ ▼** together

SECOND SETPOINT (SP2) Alarm Output
Configure SP2 output to operate as an alarm from **SP2.A** in Level 2 and set the temperature alarm setting in **SEL2** Level 1. The alarm will be triggered when the process temperature changes according to the options listed below.

Falls below the main setpoint by the value inserted at **SEI.2**.

FS.hi Rises above the main selpoint by a **SEL.2** value that is greater than the selpoint.

FS,Lo Falls below the main setpoint by a **SEL2** value that is smaller than the setpoint.

The following additional alarm functions can be added to the above alarm configurations using the features found in **SP2.b** in Level 2

Hold This prevents any alarm operation on power-up and is automatically disabled once the process reaches setpoint in

order to allow normal alarm operation.

Configure in **Level 1** using **CyC.2** to select proportional cycle time and **bnd.2** to adjust proportioning band.

- In on/off mode, bnd.2 adjusts SP2 hysteresis.

Alarm Type	ON-OFF Operating mode	Proportional Operating mode	Legend
Deviation E000- E001- E002- E003-	SP2 Output State 	SP2 Output State 	Output ON (relay or sssd energised)
Full scale E500- E501-			Output OFF (relay or sssd de-energised)
Loss of Strategy E600-	Temperature above setpoint 		LED ON

When an SP2 alarm mode is selected in SP2.A the alarm annunciator **-AL-** is displayed, alternating with the process temperature, during alarm condition.

Notes: The alarm will be automatically reset when the temperature returns within the *bnd.2* setting in Level 1.

The annunciator may be disabled by selecting function *no.AL*: *on* in level 4.

ERROR MESSAGES

FUNCTION LIST (LEVELS 1 TO 4) - LEVEL 1

Function	Options [Factory settings] shown in brackets	Description
Select Autotune		
<i>tune</i>	<i>[off]</i> , on, <i>Park</i> , <i>At.Sp</i>	Used to switch the Autotune feature on and off, to select Park or tune at seipoint. Park temporarily turns the output(s) off. To use select Park and exit program mode. To disable re-enter program at tune and select off .
SP1 Operating Parameters		
		SP1 operational board (Gain or Hysteresis)

Function	Options [Factory settings] shown in brackets	Description
Manual Control Modes		
SP1.P hAnd	0 to 100 % 'read only' [OFF] 1 to 100 % (not in ON/OFF)	Read SP1 output percentage power SP1 manual percentage power control For manual control should a sensor fail. Record typical SP1.P values beforehand.
PL.1	100 to 0 % duty cycle [100]	Set SP1 power limit percentage [limits maximum SP1 heating power during warm-up and in proportional band.
PL.2	100 to 0 % duty cycle [100]	Set SP2 percentage power limit (cooling)
SP2 Operating Modes		
SP2.A	[none] dV.hi dV.Lo bAnd FS.hi FS.Lo Cool	Main SP2 operating mode
SP2.b	[none] LiCh hold nLin	Subsidiary SP2 mode: latch/sequence ,Non-linear cool proportional band
Input Selection and Ranging		
di.SP	[1] 0.1	Select display resolution: for display of process temperature, setpoint, OFSt, Set.2, hi.SC, Lo.SC
hi.SC	sensor minimum [sensor maximum] °C/°F	Select full scale
Lo.SC	[sensor minimum] sensor maximum °C/°F	Select scale minimum (default 0 °C or 32 °F)
inPt Unit	[none] °C °F bAR Psi Ph rh SET	Select input sensor (See SENSOR SELECTION table) Select °C/°F or process units

Function	Options [Factory settings] shown in brackets	Description
Output Configuration		
Note: Head only after initial configuration. rSET ALL full reset to factory settings required to change SP1.d subsequently.		
SP1.d	[none] rLY SSd rLY1 rLY2 SSd1	Select SP1 output device Dual Relay and Dual SSd output options are factory set.
SP2.d	[none] SSd rLY2 rLY1 SSd2	Read SP2 output device (read only) Dual Relay and Dual SSd output options are factory set.
For SP1.d & SP2.d		
Note: (when in initial configuration only) Hold ★ and ▲ or ▼ for 10 seconds to move to or from output options shaded.		
burn	SP1 / SP2 [uP SC] Upscale/Upscale dn.SC Downscale/Downscale 1u.2d Upscale/Downscale 1d.2u Downscale/Upscale	Sensor burn-out/break protection Caution: Settings affect fail safe state.
rEu.d	SP1 / SP2 [1n.2d] Reverse Direct 1d.2d Direct 1r.2r Reverse Reverse 1d.2r Direct Reverse	Select output modes: Direct/Reverse Select Reverse on SP1 for heating and Direct for cooling applications. Caution: Settings affect fail safe state.
rEu.L	SP1 / SP2 [1n.2n] Normal Normal 1i.2n Invert Normal 1n.2i Normal Invert 1i.2i Invert Invert	Select SP1/2 LED Indicator modes
SPAn	[0.0] to ±25% sensor maximum	Sensor span adjust For recalibrating to align readings with another instrument e.g. External Meter, data logger. See Full Operating Manual (ADVANCED SETTINGS).
ZEro	[0.0] to ±25% sensor f/s	Zero sensor error (see Sensor span adjust above).
rEAD	[OFF] on	Select control accuracy monitor
TECh	[var] hi Lo [C] A CT b C 1 C 2 C 3 C 4 4 oS 1 uS oS 2	Read control accuracy monitor Read Autotune tuning cycle data (see Operating Manual)
UEr		Software version number
rSET	[none] ALL	Resets all functions to factory settings Caution: This selection will lose all of the current settings

6 - ABCA2 TEST / ACCEPTANCE SPECIFICATION

Customer:	SIMLAB C/O: AB Analitica		
Quotation Number:	13404	Date:	22/04/2021
Job Number:	IN1271	Date:	16/12/2021
Unit Serial Number			
Gas Box Serial Number			
Autosampler Serial Number			

13C				
Ref Gas Injection Precision	100% CO ₂ (n=5)	≤0.1‰ <i>0.04%</i> RECORD VALUE HERE	Test ☒ Sheet <u>1</u>	Install ☐ Sheet <u> </u>
Ref gas in tubes precision	10ml 5% CO ₂ (n=5)	≤0.1‰ <i>0.07%</i> RECORD VALUE HERE	Test ☒ Sheet <u>2</u>	Install ☐ Sheet <u> </u>
Breath Precision	Breath in Exetainer (n=5)	≤0.2‰ <i>0.07%</i> RECORD VALUE HERE	Test ☒ Sheet <u>3</u>	Install ☐ Sheet <u> </u>
Sensitivity	10ml 5% CO ₂ in Exetainer	Major beam 5e-9 with trap of 150 <i>2E-08</i> RECORD VALUE HERE	Test ☒ Sheet <u>4</u>	Install ☐ Sheet <u> </u>
Linearity	0.5% - 8.0% CO ₂ in Exetainer	≤0.3 ‰ change <i>0.27%</i> RECORD VALUE HERE	Test ☐ Sheet <u>5</u>	Install ☐ Sheet <u> </u>
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Test ☒ Sheet <u>6</u>	Install ☐ Sheet <u> </u>
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Test ☒ Sheet <u>7</u>	Install ☐ Sheet <u> </u>
Software Test	All read backs Valves function Autosampler bed CETAC Firmware Version No.:	☒ ☒ ☒ <i>7400 HRC</i>	Date <i>12/4/22</i>	Initial <i>SM</i>
Flow Meter S/N..... <i>N/A</i>		Leak Detector S/N..... <i>N/A</i>		
Multi-Meter S/N..... <i>N/A</i>				
Special Tests				
Linearity to be better than 0.3‰ and recorded				
Sales Signature: <i>D. O'Connor</i>(Required)		Date: <i>12.4.22</i> ..		
Test Signature: <i>S. Morris</i>(Completed)		Date: <i>12.4.22</i> ..		
Install Signature: <i>AGENT</i>(Completed)		Date: <i>N/A</i>		

Data to be transferred to:

\\CENTRAL-SERVER\\CentralFiles\\SER SPREADSHEETS\\Instrument Performance Spreadsheet.xls

7: ASSEMBLY AND TEST RECORD

Client:	SIMLAB C/O: AB Analitica		
Quotation Number:	13404	Date:	22/04/2021
Job Number:	IN1271	Date:	16/12/2021

PRODUCT:

ABCA 2

SERIAL NUMBER:

20602/1-2022/1271

 ASSEMBLED:
 (Name)



Date:

18/1/22

 PRE-TEST
 INSPECTION:
 (Production name)

P. Hayes

Date:

18/1/22

 PRE-TEST
 INSPECTION:
 (Test name)

S. Masley

Date:

18/1/22

 SYSTEM TEST:
 (Name)

S. Masley

Date:

12/4/22

 PRE-DESPATCH
 INSPECTION:
 (Name)



Date:

13/4/22

P.A.T. Test results

 In compliance with Low Voltage directive 73/23/EEC
 To Low Voltage standard EN61010 – 1:1993

Earth Continuity

0.067
 Ω

Insulation

> 300
 $M\Omega$

Earth Leakage Current

0.30

mA. @

0.05

kVA.

Tested by:

P. Hayes

Date:

18/1/22

ate: 09/12/2021
ime: 15:46:53

Sercon Limited

Page: 1

Batch Picking List

Works Order Number WO01405 Sales Order No. Quantity DueDate
BOM Reference 20602/1
BOM Description ABCA2 220-240 VOLTS (E)
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date
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Required By

Works Order No.	BOM Reference	Quantity
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Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	20101 Standard Source Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
20.00	20301 Standard Collector Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
30.00	41903 Three channel 100M/5G/5G amp assy	1.000	0.000	0.000	1.000	D-U1 Each
40.00	70101/12 20-22 Source Cable	1.000	0.000	0.000	1.000	B-H1 Each
50.00	70101/13 Standard Head Amp Cable	1.000	0.000	0.000	1.000	B-H1 Each
60.00	SI0006 20-20 Single Pump Flight Tube	1.000	0.000	1.000	1.000	D-Z Each
70.00	SI0022 Capillary Crimp Parts A & B	1.000	0.000	1.000	1.000	B-I4 Each
80.00	SI0048 Magnet Adjusting Screw	3.000	0.000	3.000	3.000	B-I3 Each
90.00	SI0049 Big Magnet Adjusting Foot	1.000	0.000	1.000	1.000	B-I3 Each
100.00	SI0050 Magnet Foot	2.000	0.000	2.000	2.000	B-I3 Each
110.00	SI0101 Columax Magnet	1.000	0.000	1.000	1.000	D-V4 Each
120.00	SI0112 NW10/16 Clamping Ring Stainless Steel - Edwards	1.000	0.000	1.000	1.000	D-Z5 Each
130.00	SI0113 NW10/16 Adapt/Cent Viton® SS - Edwards	1.000	0.000	1.000	1.000	D-Z5 Each
140.00	SI0204 Bulkhead Union 1/16 SS	3.000	0.000	3.000	3.000	B-J7 Each

Batch Picking List

150.0	SI0344 2P red illum round rocker swithc, 10A	3.000	0.000	3.000	3.000	B-H5 Each
160.0	SI0346 SPCO Plug-in Power Relay, 10A 24V DC Coil	1.000	0.000	1.000	1.000	B-H3 Each
170.0	SI0347 DIN Rail Socket For SPCO G2R-1 Relay	1.000	0.000	1.000	1.000	B-H3 Each
180.0	SI0355 DPCO Plug-in Relay, 10A 24V DC Coil	1.000	0.000	1.000	1.000	B-H3 Each
190.0	SI0373 34 Way IDC Header DIN Rail Terminal	1.000	0.000	1.000	1.000	B-H9 Each
200.0	SI0374 Connector, Terminal, Screw, Single Pole, Interlocking, Tab/Tab	4.000	0.000	4.000	4.000	B-H6 Each
210.0	SI0375 Connector, Terminal, Screw, Single Pole, Interlocking, End Plate	2.000	0.000	2.000	2.000	B-H6 Each
220.0	SI0376 DIN/Surface Socket For 6A DPCO Relay	1.000	0.000	1.000	1.000	B-H3 Each
230.0	SI0385 25 Way Machine Cont Straight D Skt, 750Vac	1.000	0.000	1.000	1.000	D-X4 Each
240.0	SI0388 9 Way Machine Cont Straight D Skt, 750Vac	1.000	0.000	1.000	1.000	D-X4 Each
250.0	SI0508 TIS DIN Rail Univ Input SMPSU 24V 300W	1.000	0.000	1.000	1.000	B-H9 Each
260.0	SI0534 3307 Telescopic Slide 457mm L 483mm	1.000	0.000	1.000	1.000	B-H9 Each
270.0	SI0570 15 way Solder Contact ZD skt 5A 1000 Vac	2.000	0.000	2.000	2.000	D-X4 Each
280.0	SI0630 Axial fan finger guard 80Hx80Wmm	7.000	0.000	7.000	7.000	B-H7 Each
290.0	SI0631 9 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
300.0	SI0632 15 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
310.0	SI0687 1/8" PTFE Ferrules - Blank	1.000	0.000	1.000	1.000	B-J5 Each
320.0	SI0697 MOVPT-1-50 Pneumatic Valve	1.000	0.000	1.000	1.000	B-K3 Each
330.0	SI0703 1/8-1/16" PTFE Reducing Ferrule	1.000	0.000	1.000	1.000	B-J5 Each
340.0	SI0756 Connector, Crimp Terminal, Adaptor, Male-Male	10.000	0.000	10.000	10.000	D-W1 Each
350.0	SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.200	0.000	0.200	0.200	B-J6 Each

Batch Picking List

360.0	SI0777 Spacer,circular,Nylon,M4,tapped/studded,25mm	4.000	0.000	4.000	4.000	D-W3 Each
370.0	SI0793 Fan,axial,DC,80mm sqx15mm,3000rpm,53.0cu.m/h 24V	7.000	0.000	0.000	7.000	B-H7 Each
380.0	SI0895 Blue Cat5e UTP patch lead, 2m	1.000	0.000	1.000	1.000	B-H1 Each
390.0	SI0900 25 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
400.0	SI0903 I.E.C Socket Mount	1.000	0.000	1.000	1.000	B-H5 Each
410.0	SI0960 IEC Cord - Plug	1.000	0.000	1.000	1.000	B-I2 Each
420.0	SI0961 IRMS Electronics, basic unit plus Clk/Handshake PCB	1.000	0.000	1.000	1.000	D-V3 Each
430.0	SI1004 Right-Angled Bracket 25mm	1.000	0.000	1.000	1.000	D-W3 Each
440.0	SI1241 Solenoid Valve.3-Port.	1.000	0.000	1.000	1.000	B-J4 Each
450.0	SI1244 Seal Kit	1.000	0.000	1.000	1.000	B-J3 Each
460.0	SI1245 SOL Cable	1.000	0.000	1.000	1.000	B-J3 Each
470.0	SI1246 2-Station Manifold - M5	1.000	0.000	1.000	1.000	B-J2 Each
480.0	SI1255 M5 Plug	1.000	0.000	1.000	1.000	B-J3 Each
490.0	SI1328 FN9222 Screw mount inlet filter, 15A	1.000	0.000	1.000	1.000	B-H4 Each
500.0	SI1329 RPS-60 Series SMPSU, 24V 2.5A	1.000	0.000	1.000	1.000	B-H5 Each
510.0	SI1330 Cover kit for 2x4inch power supplies	1.000	0.000	1.000	1.000	B-H5 Each
520.0	SI1331 Connector kit, VHR-3N,VHR-4N,BVH-21T-P1.1	1.000	0.000	1.000	1.000	B-H5 Each
530.0	SI1344 IEC connector retaining clamp kit, KT0006	2.000	0.000	2.000	2.000	B-H4 Each
540.0	SI1364 SOSS 101 Invisible Hinge 43x10mm	2.000	0.000	2.000	2.000	B-H8 Each
550.0	SI1375 Anti surge T HBC min fuse,3.15A 5x20mm	1.000	0.000	1.000	1.000	B-K7 Each
560.0	SI1418 Metal EMC screen filter, 80Hx80Wmm	3.000	0.000	3.000	3.000	B-H7 Each

Batch Picking List

570.00	SI1478 Double Flange	1.000	0.000	1.000	1.000	B-H8 Each
580.00	SI1482 34 Way IDC Bump Polarised Socket, 1A	1.000	0.000	1.000	1.000	D-X4 Each
590.00	SI1548 Anti surge T LBC min fuse, 4A 5x20mm	1.000	0.000	1.000	1.000	B-K7 Each
600.00	SI1579 Door Pin	1.000	0.000	1.000	1.000	B-H8 Each
610.00	SI1580 Source Block Stud	2.000	0.000	2.000	2.000	D-U2 Each
620.00	SI1594 15 Way D Plate	1.000	0.000	1.000	1.000	D-U3 Each
630.00	SI1595 37 Way D Plate	1.000	0.000	1.000	1.000	D-U3 Each
640.00	SI1693 Non Magnetic Catch	1.000	0.000	1.000	1.000	B-H8 Each
650.00	SI1743 ABCA 2 Cabinet	1.000	0.000	1.000	1.000	B Each
660.00	SI1758 ABCA 2 FLIGHT TUBE BASE	1.000	0.000	1.000	1.000	D-Z Each
670.00	SI1759 ABCA 2 MAGNET BASE	1.000	0.000	1.000	1.000	D-Z Each
680.00	SI1792 Jack Screw Mounting Kit	1.000	0.000	1.000	1.000	D-X4 Each
690.00	SI1793 37 Way IDC D Hood	1.000	0.000	1.000	1.000	D-X4 Each
700.00	SI1794 37 Way IDC D Socket - Metal	1.000	0.000	1.000	1.000	D-X4 Each
710.00	SI1795 37 Way IDC D Plug - Metal	1.000	0.000	1.000	1.000	D-X4 Each
720.00	SI1821 3 Port valve	1.000	0.000	1.000	1.000	B-J3 Each
740.00	SI1899 1/16 x M5 Fitting	4.000	0.000	4.000	4.000	B-J6 Each
750.00	SI1900 Dowty Seal - M5	4.000	0.000	4.000	4.000	B-J6 Each
760.00	SI1919 Power cord C13 bottom angle one end 2m	1.000	0.000	1.000	1.000	B-I2 Each
770.00	SI2288 Internal USB 4.5m	1.000	0.000	1.000	1.000	B-H2 Each
780.00	SI2289 Oil Mist Eliminator	1.000	0.000	1.000	1.000	D-Z6 Each

Batch Picking List

790.0	SI2294 NW10 x 3/8" Bsp Adapter	1.000	0.000	1.000	1.000	D-Z5 Each
800.0	SI2304 Screwdriver bayonetcap fuseholder 5x20mm	2.000	0.000	2.000	2.000	B-H6 Each
810.0	SI2411 Split cable gland	1.000	0.000	1.000	1.000	B-H2 Each
820.0	SI2412 Quick Insert Pk 10	1.000	0.000	1.000	1.000	B-H2 Each
840.0	SI2477 ABCA2 Door Graphic	1.000	0.000	1.000	1.000	C Each
830.0	SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	1.000	0.000	0.000	1.000	B-I1 Each
730.0	SI2662 nEXT85 ABCA KIT	1.000	0.000	0.000	1.000	D-Z Each

Henry

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Sercon Limited

Page: 1

Batch Picking List

Works Order Number WO01406
BOM Reference 41903
BOM Description Three channel 100M/5G/5G amp assy
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Sales Order No. Quantity DueDate

Recd in 9/12/21

Drawings				
Reference/Description	Valid From	Valid To	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
20.00	SI0035 Feedthru' Connector	4.000	0.000	4.000	4.000	D-X6 Each
30.00	SI1599 Brass Clip	4.000	0.000	4.000	4.000	D-X Each
40.00	SI1802 M3x8mm Hex Spacer	0.000	0.000	0.000	0.000	B-H2 Each
50.00	SI2235 Head Amp Plate Blank	1.000	0.000	1.000	1.000	D-U1 Each
60.00	SI2237 Head amp Cover	1.000	0.000	1.000	1.000	D-U1 Each
70.00	SI2253 Brass F-F threaded hex spacer, M3x40mm	0.000	0.000	0.000	0.000	B-H2 Each
80.00	SI2260 15 way IDC DIN41652 class2 D plug	0.000	0.000	0.000	0.000	B-H2 Each
90.00	SI2261 15 way IDC DIN41652 class2 D socket	0.000	0.000	0.000	0.000	B-H2 Each
10.00	SI2526 Three channel 100M/5G/5G amp pcb	1.000	0.000	1.000	1.000	D-U1 Each

James

Date: 09/12/2021
Time: 16:12:34

Sercon Limited

Page: 1

Batch Picking List

Works Order Number	WO01408	Sales Order No.	Quantity	DueDate
BOM Reference	70101/13			
BOM Description	Standard Head Amp Cable			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			
Works Order Notes	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			

Built in 9/12/21

<u>Drawings</u>				
<u>Reference/Description</u>	<u>Valid From</u>	<u>Valid To</u>	<u>Revision Number</u>	<u>Date</u>

<u>Required By</u>		
<u>Works Order No.</u>	<u>BOM Reference</u>	<u>Quantity</u>

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
20.00	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
30.00	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
40.00	SI2439 6 Pair Twisted Pair Industrial Cable	0.000	0.000	0.000	0.000	Each

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Janus

Sercon Limited

Page: 1

Batch Picking List

Works Order Number WO01407
BOM Reference 70101/12
BOM Description 20-22 Source Cable
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Sales Order No.

Quantity DueDate

Booked 9/12/21

Drawings

Reference/Description	Valid From	Valid To	Revision Number	Date
-----------------------	------------	----------	-----------------	------

Required By

Works Order No.	BOM Reference	Quantity
-----------------	---------------	----------

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI1127 Plug Housing, 9way	1.000	0.000	1.000	1.000	D-U2 Each
20.00	SI1128 Strain Relief, 9way	2.000	0.000	2.000	2.000	D-U2 Each
30.00	SI1157 Cable for Source	0.000	0.000	0.000	0.000	D Each
40.00	SI1334 Crimp pin, mate-n-lok Pk/100	0.000	0.000	0.000	0.000	D-W2 Each
50.00	SI1476 Feedthrough Boss	1.000	0.000	1.000	1.000	D-U2 Each
60.00	SI1477 FeedThrough Boss Cover	1.000	0.000	1.000	1.000	D-U2 Each
70.00	SI1599 Brass Clip	9.000	0.000	9.000	9.000	D-X Each

7: ASSEMBLY AND TEST RECORD

Client:	SIMLAB C/O: AB Analitica		
Quotation Number:	13404	Date:	22/04/2021
Job Number:	IN1271	Date:	16/12/2021

PRODUCT:

ABCA7 GPS BOX

SERIAL NUMBER:

10602/2022/1271

 ASSEMBLED:
 (Name)

H. Thompson

Date:

18/1/22

 PRE-TEST
 INSPECTION:
 (Production name)

P. Hayes

Date:

18/1/22

 PRE-TEST
 INSPECTION:
 (Test name)

S. Myers

Date:

18/1/22

 SYSTEM TEST:
 (Name)

S. Myers

Date:

12/4/22

 PRE-DESPATCH
 INSPECTION:
 (Name)

P. Hayes

Date:

13/4/22

P.A.T. Test results

 In compliance with Low Voltage directive 73/23/EEC
 To Low Voltage standard EN61010 – 1:1993

Earth Continuity

_____ Ω

Insulation

_____ MΩ

Earth Leakage Current

_____ mA. @ _____ kVA.

Tested by:

Date:

Batch Picking List

Works Order Number	WO01436	Sales Order No.	Quantity	DueDate
BOM Reference	10602			
BOM Description	ABCA2 GAS BOX			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Drawings				
Reference/Description	Valid From	Valid To	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SC2463 10ml Gas Tight Syringe	1.000	0.000	1.000	1.000	B-K3 Each
20.00	SI0022 Capillary Crimp Parts A & B	2.000	0.000	2.000	2.000	B-I4 Each
30.00	SI0060 Piston	1.000	0.000	1.000	1.000	B-K2 Each
40.00	SI0070 Syringe Adaptor	1.000	0.000	1.000	1.000	B-K2 Each
50.00	SI0071 Syringe Coupling	1.000	0.000	1.000	1.000	B-K2 Each
60.00	SI0196 Reducing Union 1/4 OD x 1/16 OD SS	2.000	0.000	2.000	2.000	B-J7 Each
70.00	SI0198 Tee Union 1/16 SS	3.000	0.000	3.000	3.000	B-J7 Each
80.00	SI0199 Male Connector 1/16 OD x 1/8 NPTM SS	8.000	0.000	8.000	8.000	B-J7 Each
90.00	SI0204 Bulkhead Union 1/16 SS	4.000	0.000	4.000	4.000	B-J7 Each
100.00	SI0205 Bulkhead Union 1/8 SS	2.000	0.000	2.000	2.000	B-J7 Each
110.00	SI0366 Flow Meter AWM3100V	1.000	0.000	1.000	1.000	B-J3 Each
120.00	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	2.000	0.000	2.000	2.000	D-X4 Each
130.00	SI0568 37 Way Solder Contact ZD Plug , 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
140.00	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each

Batch Picking List

150.00	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
160.00	SI0648 M3x13mm Nylon Pillar Male-Female,	2.000	0.000	2.000	2.000	D-W3 Each
170.00	SI0701 PTFE Ferrules 1/4" (RE21128/214400)	2.000	0.000	2.000	2.000	B-J7 Each
180.00	SI0703 1/8-1/16" PTFE Reducing Ferrule	4.000	0.000	4.000	4.000	B-J5 Each
190.00	SI0767 6 Way VALCO	1.000	0.000	1.000	1.000	B-K6 Each
200.00	SI0837 Perma Pure Dryer	1.000	0.000	1.000	1.000	B-K3 Each
210.00	SI0883 M3x30mm Nylon Spacers Male-Female Pk/50	0.100	0.000	0.100	0.100	D-W3 Each
220.00	SI0926 0/60 psi Gauge	2.000	0.000	2.000	2.000	B-K3 Each
240.00	SI1052 3 Way MOLEX Clip	1.000	0.000	1.000	1.000	B-J2 Each
250.00	SI1186A O-Ring Seals for Syringe Plunger Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
260.00	SI1187A Syringe Block O-Ring (for Gas Box) Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
270.00	SI1242 2 Way Solenoid Valve	3.000	0.000	3.000	3.000	B-J4 Each
280.00	SI1245 Cable for mini solenoid valve	4.000	0.000	4.000	4.000	B-J3 Each
290.00	SI1251 Solenoid Valve (Autosampler)	2.000	0.000	2.000	2.000	B-J3 Each
300.00	SI1535 1 Way Ref Gas Manifold	2.000	0.000	2.000	2.000	B-J2 Each
310.00	SI1603 Bulkhead fitting 4 to 1/8	1.000	0.000	1.000	1.000	B-K5 Each
320.00	SI1604 Male Conn 1/8-UNI 1/8	1.000	0.000	1.000	1.000	B-K5 Each
330.00	SI1720 Speed Controller 1/8-4mm Tube	2.000	0.000	2.000	2.000	B-K5 Each
350.00	SI1774 1/8 Female Coupling BSP	2.000	0.000	2.000	2.000	B-J9 Each
360.00	SI1784 4mm Y Fitting	1.000	0.000	1.000	1.000	B-K5 Each
370.00	SI1792 3342-2 jack screw mounting kit	2.000	0.000	2.000	2.000	D-X4 Each

Batch Picking List

380.0	SI1793	2.000	0.000	2.000	2.000	D-X4
	37 way IDC flat cable plastic D backshell					Each
390.0	SI1794	1.000	0.000	1.000	1.000	D-X4
	37 way IDC class 2 metal shell D socket					Each
400.0	SI1795	1.000	0.000	1.000	1.000	D-X4
	37 way IDC class 2 metal shell D plug					Each
410.0	SI1821	2.000	0.000	2.000	2.000	B-J3
	3 Port valve					Each
430.0	SI1899	14.000	0.000	14.000	14.000	B-J6
	1/16 x M5 Fitting					Each
440.0	SI1900	14.000	0.000	14.000	14.000	B-J6
	Dowty Seal - M5					Each
450.0	SI2078	1.000	0.000	1.000	1.000	D-W3
	Right Angle Bracket					Each
460.0	SI2244	8.000	0.000	8.000	8.000	B-K4
	Male Elbow 4mm to M5					Each
470.0	SI2296	2.000	0.000	2.000	2.000	B-J4
	Precision Flow Control					Each
480.0	SI2307	2.000	0.000	2.000	2.000	B-J4
	60 psi Regulator					Each
490.0	SI2329	1.000	0.000	1.000	1.000	B-K2
	Double acting roundline cylinder, 20x25mm					Each
500.0	SI2330	1.000	0.000	1.000	1.000	B-K2
	Rear clevis for 20/25mm cylinder					Each
510.0	SI2542	1.000	0.000	1.000	1.000	A-D2
	ABCA2 HayeSep Q 60-80 mesh Packed Column - Fast Run Ti					Each

Batch Picking List

Works Order Number	WO01477
3OM Reference	20602
3OM Description	ABCA2 SYSTEM
Qty Required	1.000
Qty Outstanding	1.000
Manuf.Instructions	
Works Order Notes	

Quantity DueDate

<u>Reference/Description</u>	<u>Valid From</u>	<u>ValidTo</u>	<u>Revision Number</u>	<u>Date</u>
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<u>Works Order No.</u>	<u>BOM Reference</u>	<u>Quantity</u>
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Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	10502/1 ABCA2 Sercon XYZ Autosampler	1.000	0.000	1.000	1.000	D Each
20.00	10602 ABCA 2 GAS BOX	1.000	0.000	1.000	1.000	D Each
30.00	20602/1 ABCA2 220-240 VOLTS	1.000	0.000	1.000	1.000	Each
40.00	70101-1 ABCA2 spares kit (supp. with ABCA2)	1.000	0.000	1.000	1.000	Z Each
50.00	SI0155 Windows 7 based data system	1.000	0.000	1.000	1.000	Area E Each
90.00	SI2391 PC Monitor	1.000	0.000	1.000	1.000	Area E Each

Batch Picking List

Works Order Number	WO01478	Sales Order No.	Quantity	DueDate
BOM Reference	10502/1			
BOM Description	ABCA2 XYZ AUTOSAMPLER			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Drawings				
Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI0708 SSUE 16/16 Stainless Steel Union	1.000	0.000	1.000	1.000	B-J9 Each
20.00	SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.100	0.000	0.100	0.100	B-J6 Each
30.00	SI1718 ASX-7400HR SerCon version autosampler	1.000	0.000	1.000	1.000	C Each
40.00	SI1730 ABCA CTAC Needle	1.000	0.000	1.000	1.000	A-G1 Each
50.00	SI1768 ABCA 2 CTAC Base	1.000	0.000	1.000	1.000	D-V2 Each
60.00	SI1770 ABCA 2 CTAC Tube Racks	5.000	0.000	5.000	5.000	D-V2 Each
70.00	SI1788 Tubing Tamers (\$15)	2.000	0.000	2.000	2.000	B-I4 Each
80.00	SI2351 4 Port PCI Express (PCIe) SuperSpeed USB 3.0 Card Adapter	1.000	0.000	1.000	1.000	Area E Each

8 - Serial Numbers Record Document

Client:	SIMLAB C/O: AB Analytica		
Quotation Number:	13404	Date:	22/04/2021
Job Number:	IN1271	Date:	16/12/2021

Units	S/N
MS/ABCA	206021-2022/1271
Integra 2	
Prep Unit 1	
Prep Unit 2/Misc	
Electronics Upgrade	
CETAC	052113A7400HR
Gas Box	10602-2022/1271
Autosampler	
BCR	0910 0201
Dual Heater Block	

Pump Kit and Optics	S/N
Turbo pump S	210693024
Turbo pump A	
Rotary Pump	210159704
Voltage	110 / 240
Gauge S	210704102
Gauge A	
Source	20101-175
Collector 1	20301-114
Collector 2	
Magnet	N8 13-05-21

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	2021 0014
Prep PCB	
VFC PCB	
Watchdog PCB	
Head Amp PCB 1	21005
Head Amp PCB 2	
Electromagnet RP	

Furnaces	S/N
Combustion	
Reduction	
HT-EA	
GC Oven	
Furnace 1	
Furnace 2	

PC	S/N
PC	CA004K3
Monitor	GRQRCT3
Printer	

Key

Pumps:	E: Edwards P: Pfeiffer
Furnaces:	V/S: Vecstar E: Elite
Magnet:	E: Electromagnet S: Standard
Turbos & Gauges:	S: Source A: Analyser
Collectors:	Std: Standard S: Sulphur HD: Hydrogen Deuterium

Additional System Info:

Packing List

Reference: 1.411/00

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1271

Consignee:

AB Analitica S.r.l
Via Svizzera 16
35127
Padova
Italy

Contact Name: Eric Mossel
Contact Tel Number: +39 049 761698

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	20602/1	ABCA	20602/1-2022/1271

Packed by:

Date:

ABrev *John Kane*
13/04/22

Claims for damage or shortages must be made within 3 days

Packing List

Reference: 1.411/00

Shipper / Exporter:

Sercon Limited
 Unit 3B Crewe Trade park
 Gateway
 Crewe
 CW1 6JT
 UK

Tel: +44 (0) 1270 580008
 Reference: IN1271

Consignee:

AB Analitica S.r.l
 Via Svizzera 16
 35127
 Padova
 Italy

Contact Name: Eric Mossel
 Contact Tel Number: +39 049 761698

BOX: 2

Quantity	Product Code	Product Description	Serial Number: if available
✓ 5		CETAC racks	
✓ 1		CETAC tray	
✓ 1		Rotary Pump	210159704
✓ 1		Permanent Magnet + feet	N8 13-05 21
✓ 3		Euro Mains Cables	
✓ 1		Ribbon Cable - to gas box	
✓ 1		Flow Cable - to gas box	
✓ 1	70101-1	ABCA Spares Kit	
✓ 1		Electronic Manual on software USB	
✓ 1		PC	CAKK4K3
✓ 1		Monitor	285BWB3
✓ 1		USB software backup	
✓ 1		USB windows recovery	

Packed by:

Date:

[Signature]
 13/04/22

Claims for damage or shortages must be made within 3 days

Packing List

Reference: 1.411/00

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1271

Consignee:

AB Analitica S.r.l
Via Svizzera 16
35127
Padova
Italy

Contact Name: Eric Mossel
Contact Tel Number: +39 049 761698

BOX: 3

Quantity	Product Code	Product Description	Serial Number: if available
✓ 1		CETAC Autosampler	052113A7400HR
✓ 1		CETAC Arm & Needle	
✓ 1	SI1767	Barcode reader	09100201
✓ 1		Gas Box	10602-2022/1271
✓ 1		Power supply - CETAC cable	
✓ 3		Euro Mains leads - CETAC cable	
✓ 1		USB Cable - CETAC cable	

Packed by: 

Date: 13/04/22

Claims for damage or shortages must be made within 3 days