



# Parts Manual

## Proportioning Unit

“**r-connect**” & “**r-connect+**”



Issue 2.1

14/07/2026

Ref. NR-00137-ENG



***Before installing the unit and starting it up, carefully read all the technical and safety documentation included in this manual. Pay special attention to the information to know and understand the handling and the conditions of use of the unit. All of the information is aimed at enhancing User Safety and avoiding possible breakdowns derived from the incorrect use of the unit.***



## **WARRANTY**

HI-TECH SPRAY EQUIPMENT, S. A. (hereinafter "HI-TECH") grants this Limited Guarantee to the original buyer (hereinafter the "Client") for the unit and the original accessories given with the unit (hereinafter the "Product") against any fault in the design, materials or manufacture of the Product at the time of the first purchase by the user and for a duration of two (2) years thereafter, except in the case of hoses and TSU's, which will have a warranty period of one (1) year. Additionally, for any other product manufactured by external suppliers, the warranty period will be as specified by the manufacturer.

If during the guarantee period and under normal conditions of use, the Product should fail to work correctly due to defects of design, material or manufacture, the authorised distributor of the country where the HI-TECH Product or technical assistance service has been purchased shall repair or replace the Product in accordance with what is established in the following:

### **CONDITIONS**

- a) The validity of this guarantee will be subject to the presentation of the original invoice issued by the HI-TECH authorised distributor for the sale of the Product along with the Product handed over for repair or replacement, which must show the date of purchase and the serial number. HI-TECH reserves the right to refuse to give the guarantee service when the indicated data fail to appear on the invoice or have been modified after the purchase of the Product.
- b) The repaired or replaced Product will continue to maintain the original guarantee for the time remaining until the end of the guarantee or for three (3) months from the repair date, if the remaining period of the original guarantee were shorter.
- c) This guarantee will not be applied to the faults in the Product caused by its faulty installation, the natural wear and tear of the components, any use other than that considered normal for this Product or which should fail to strictly comply with the instructions of use provided by HI-TECH; due to accident, carelessness, adjustments, alterations or modifications of the Product not authorised by HI-TECH or due to the use of accessories, heating devices, pumping equipment and/or dispensers that have not been approved or manufactured by HI-TECH.
- d) The guarantee applicable to the components and accessories forming part of the Product and which have not been made by HI-TECH will be limited to the guarantee offered by the original manufacturer thereof.

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The restrictions on the guarantee suppose no limitation on the legal rights of the consumer established in applicable national legislation, nor do they affect any rights derived from the bargain and sale agreement between the consumer and supplier.

All information provided in this manual has been included in the confidence that it is true, although it does not constitute any responsibility or implicit or explicit guarantee. HI-TECH reserves the right at any time and without prior warning to make all improvements and modifications necessary to this manual, in order to rectify any possible typographical errors, increase the information contained or insert the changes caused to the characteristics and performance of the unit.

## **SAFETY AND HANDLING**

The equipment described in this manual has been designed and manufactured in compliance with the following European Directives, following as application guide the harmonized standards detailed and in conformity with the relevant UK Statutory Instruments (and their amendments):

**2006/42/EC Machinery Directive**

**2014/35/EU Low Voltage Directive**

**2014/30/EU EMC Directive**

**2011/65/EU RoHS Directive with amendment 2015/863**

**2012/19/EU Directive on waste electrical and electronic equipment**

Standards used:

EN ISO 12100:2010

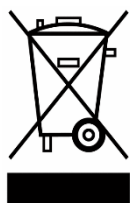
EN 60204-1:2018

EN IEC 61000-6-4:2019

EN IEC 61000-6-2:2019

EN IEC 63000:2018





Electrical products cannot be thrown out with the rubbish. They must be taken to a dedicated collection point for an environmentally sound disposal in accordance with local regulations. You must contact your local collective or retailer for information about recycling. Before leaving WEEE at appropriate collection facilities, batteries must be removed and disposed of separately for proper recycling. The packaging materials are recyclable.

Dispose of packaging materials in an environmentally sound manner and place them at the disposal of recycling sectors.

### TRANSPORT AND STORAGE

Proper precautions must be taken so that the equipment can withstand the effects of transport and storage temperatures between -25°C and +55°C or up to +70°C for short periods that do not exceed 24 hours. Also, appropriate means to prevent damage from moisture, vibrations or shocks must be foreseen.

This chapter contains information on the safety, handling and use of the **G-CONNECT** series metering unit.



***Before installing the unit and starting it up, carefully read all the technical and safety documentation included in this manual. Pay special attention to the information to know and understand the operation and the conditions of use of the unit. All of the information is aimed at enhancing User Safety and avoiding possible breakdowns derived from the incorrect use of the unit.***

***!WARNING!*** Establishes information to alert on a situation that might cause serious injuries if the instructions are not followed.

***!PRECAUTION!*** Establishes information that indicates how to avoid damage to the unit or how to avoid a situation that could cause minor injuries.

***NOTE:*** is relevant information on a procedure being carried out.

Careful study of this manual will enable the operator to know the characteristics of the unit and the operating procedures. By following the instructions and recommendations contained herein, you will reduce the potential risk of accidents in the installation, use or maintenance of the unit; you will provide a better opportunity for incident-free operation for a longer time, greater output and the possibility of detecting and resolving problems fast and simply.

Keep this Service Manual for future consultation of useful information at all times. If you lose this manual, ask for a new copy from your **HI-TECH** local distributor or directly contact **HI-TECH SPRAY EQUIPMENT**.

**!WARNING!** The design of the G-Connect and G-Connect+ dosing unit does not allow it to be used in potentially explosive atmospheres or to exceed the pressure and temperature limits described in the technical specifications of this manual.

When working with the unit, it is recommended that the operator wear suitable clothing and elements of personal protection, including, without limitation, gloves, protective goggles, safety footwear and face masks. Use breathing equipment when working with the machine in enclosed spaces or in areas with insufficient ventilation. The introduction and follow-up of safety measures must not be limited to those described in this manual. Before starting up the machine, a comprehensive analysis must be made of the risks derived from the products to be dispensed, the type of application and the working environment



***To prevent all possible bodily harm caused by incorrect handling of the raw materials and solvents used in the process, carefully read the safety information provided by your supplier.***



***Deal with the waste caused according to current regulations.***

***Disconnect the unit from the power supply before carrying out any operation inside the electrical console.***



***The electrical maintenance of the machine must only be performed by a qualified electrician.***

***To avoid damage caused by the impact of pressurized fluids, do not open any connection or perform maintenance work on components subject to pressure until the pressure has been completely eliminated.***



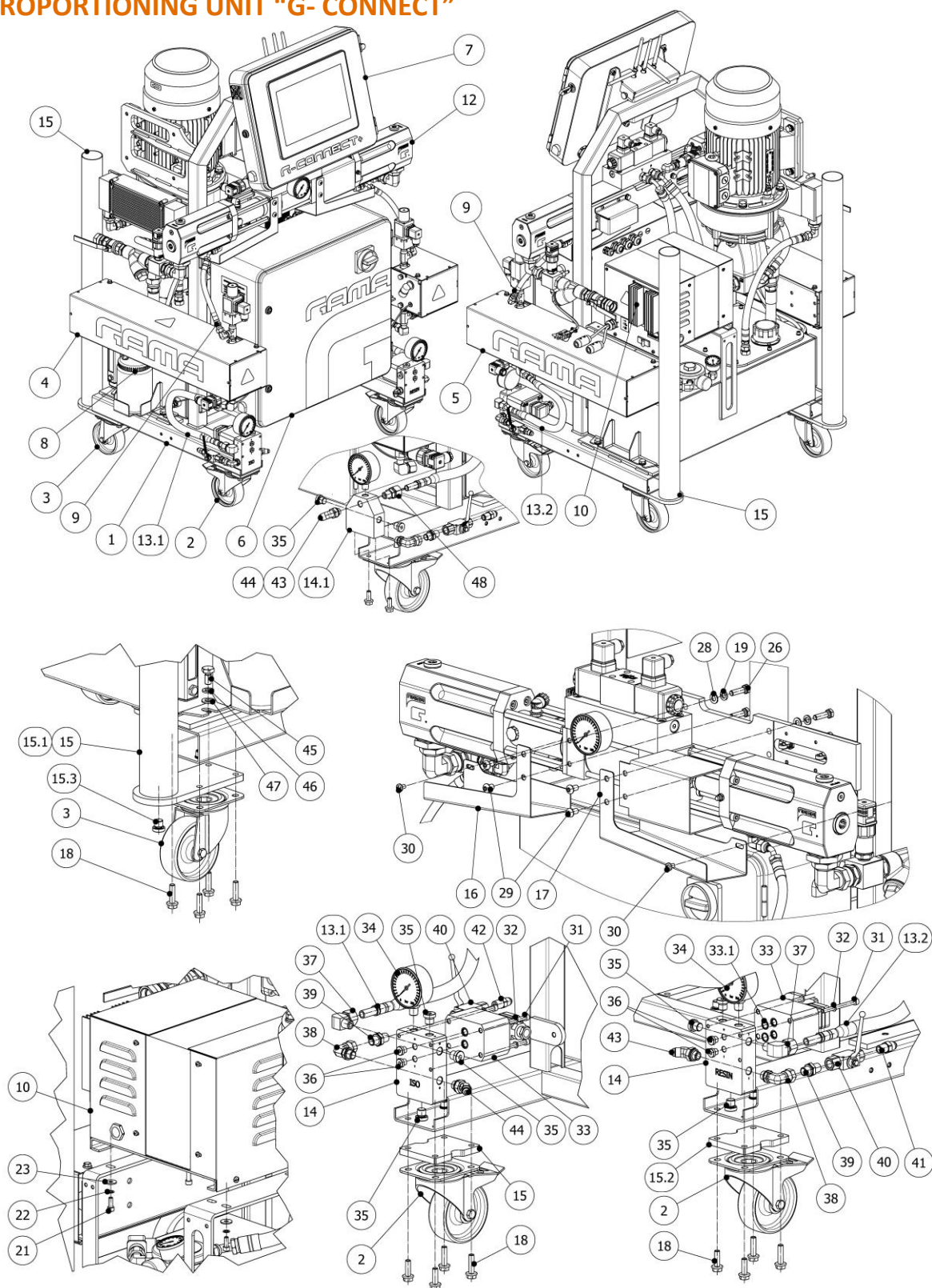
***Use suitable protection when operating, maintaining or remaining in the operating area of the unit. This includes, but is not limited to, the use of masks, protective goggles, gloves, shoes and safety clothing.***

***The unit includes components that reach temperatures that are liable to cause burns. The hot parts of the unit must not be handled until they have cooled.***



***To prevent serious harm by crushing or loss of limbs, do not work with the unit without the safety guards installed on all moving parts. Make sure that all of the safety protections are correctly reinstalled after all repair or maintenance work is completed.***

## PROPORTIONING UNIT "G-CONNECT"



**Figure 1. Proportioning Unit "G-Connect" and "G-Connect+"**



***"G-Connect" and "G-Connect+"***  
**Proportioning Unit**  
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**Table 1. Proport. Unit "G-Connect" and "G-Connect+", Parts List**

| Item | Description                                         | Part Number   | Qty. |
|------|-----------------------------------------------------|---------------|------|
| 1    | Frame Assembly                                      | MQ-21001-00   | 1    |
| 2    | Front Wheel with Brake                              | MQ-01002      | 2    |
| 3    | Back Wheel                                          | MQ-01016      | 2    |
| 4    | A Primary Heater                                    | See Table 2   | 1    |
| 5    | R Primary Heater                                    | See Table 4   | 1    |
| 6    | Electrical Components Cabinet                       | See Table 10  | 1    |
| 7    | Control Console Assembly <b><i>"G-Connect"</i></b>  | EL-00293      | 1    |
|      | Control Console Assembly <b><i>"G-Connect+"</i></b> | EL-00307      |      |
| 8    | Lube Reservoir                                      | MQ-01022      | 1    |
| 9    | Pump/Heater Hose                                    | MA-00212      | 2    |
| 10   | Hose Transformer                                    | EL-00127-15   | 1    |
| 12   | Pump Line Assembly                                  | PU-06400-012G | 1    |
| 13.1 | ISO Hose, Heater - Distributor                      | MA-00213      | 1    |
| 13.2 | POL Hose, Heater - Distributor                      | MA-00214      | 1    |
| 14   | Flow meter Manifold (OPTIONAL)                      | MQ-21008      | 2    |
| 14.1 | Outlet Manifold without Flow meter (STANDARD)       | MQ-21012-01   |      |
| 15   | Transfer Pump Support Assy (OPTIONAL)               | MQ-01015-00   | 1    |
| 15.1 | Rear Support (included in item15)                   | MQ-01015-04   | 2    |
| 15.2 | Front Plate (included in item15)                    | MQ-01015-03   | 2    |
| 15.3 | Plug (included in item15)                           | RA-00013      | 2    |
| 16   | ISO Drip Pan                                        | MQ-21005      | 1    |
| 17   | POL Drip Pan                                        | MQ-21006      | 1    |
| 18   | Hex. Flange Screw                                   | TN-00504      | 16   |
|      | Hex. Flange Screw (with Transfer pumps sup.)        | TN-00523      |      |
| 19   |                                                     |               |      |
| 20   |                                                     |               |      |



| Item | Description                                    | Part Number | Qty. |
|------|------------------------------------------------|-------------|------|
| 21   | Hex. Cap Screw                                 | TN-00453    | 4    |
| 22   | Washer                                         | TN-00025    | 4    |
| 23   | Washer                                         | TN-00395    | 4    |
| 25   |                                                |             |      |
| 26   | Hex. Cap Screw                                 | TN-00054    | 4    |
| 27   | Washer                                         | TN-00028    | 4    |
| 28   | Washer                                         | TN-00119    | 4    |
| 29   | "ULS" Cap Screw                                | TN-00237    | 4    |
| 30   | "ULS" Cap Screw                                | TN-00248    | 2    |
| 31   | Allen Cap Screw (OPTIONAL)                     | TN-00178    | 8    |
| 32   | Washer (OPTIONAL)                              | TN-00048    | 8    |
| 33   | Flow meter (OPTIONAL)                          | EL-00079-01 | 2    |
| 33.1 | O-ring (included in Pos. 33) 2x Flow meter     | OR-00119    |      |
| 34   | Pressure Gauge                                 | HI-00035    | 2    |
| 35   | Plug (without flow meter & recirculation)      | RA-00013    | 2    |
|      | Plug (with recirculation & without flow meter) |             | 4    |
|      | Plug (with flow meter only)                    |             | 6    |
| 36   | Plug (with flow meter only)                    | RA-00211    | 4    |
| 37   | 90° Elbow, for Pipe 12 (with flow meter only)  | RA-00038    | 2    |
| 38   | 90° Swivel Elbow (with recirculation only)     | RA-00496    | 2    |
|      | 90° Swivel Elbow (without recirculation)       |             | 0    |
| 39   | Male Union (with recirculation only)           | RA-00138    | 2    |
|      | Male Union (without recirculation)             |             | 0    |
| 40   | Ball Valve (with recirculation only)           | RA-00217    | 2    |
|      | Ball Valve (without recirculation)             |             | 0    |
| 41   | Male Union POL (with recirculation only)       | RA-00147    | 1    |
|      | Male Union POL (without recirculation)         |             | 0    |



| Item | Description                                    | Part Number | Qty. |
|------|------------------------------------------------|-------------|------|
| 42   | Male Union ISO (with recirculation only)       | RA-00146    | 1    |
|      | Male Union ISO (without recirculation)         |             | 0    |
| 43   | 45° Swivel Elbow POL                           | RA-00041    | 1    |
| 44   | 45° Swivel Elbow ISO                           | RA-00042    | 1    |
| 45   | Hex. Cap Screw                                 | TN-00465    | 4    |
| 46   | Washer                                         | TN-00087    | 4    |
| 47   | Washer                                         | TN-00162    | 4    |
| 48   | Straight Tube Fitting Ø12 (without flow meter) | RA-00033    | 2    |
|      | Straight Tube Fitting Ø12 (with flow meter)    |             | 0    |

**Table 2. Primary Tube Heaters "A" ISO "G-Connect", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21007-00CT | 400V | A Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21007-00FT | 230V | A Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 3. Round Primary Heaters "A" ISO "G-Connect", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21009-00CT | 400V | A Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21009-00GT | 230V | A Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 4. Primary Tube Heaters "R" Resin "G-Connect", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21008-00CT | 400V | R Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21008-00FT | 230V | R Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 5. Round Primary Heaters "R" Resin "G-Connect", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21010-00CT | 400V | R Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21010-00GT | 230V | R Primary Heater 6000 W with Transducer / 250 bar – 3500 psi / 230 V |



**Table 6. Primary Tube Heaters "A" ISO "G-Connect+", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21001-00AT | 400V | A Primary Heater 8000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21001-00GT | 230V | A Primary Heater 8000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 7. Round Primary Heaters "A" ISO "G-Connect+", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21003-00BT | 400V | A Primary Heater 9000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21003-00FT | 230V | A Primary Heater 9000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 8. Primary Tube Heaters "R" POL "G-Connect+", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21002-00AT | 400V | R Primary Heater 8000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21002-00GT | 230V | R Primary Heater 8000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 9. Round Primary Heaters "R" POL "G-Connect+", Reference List**

| Reference     |      | Description                                                          |
|---------------|------|----------------------------------------------------------------------|
| CL-21004-00BT | 400V | R Primary Heater 9000 W with Transducer / 250 bar – 3500 psi / 400 V |
| CL-21004-00FT | 230V | R Primary Heater 9000 W with Transducer / 250 bar – 3500 psi / 230 V |

**Table 10. Electrical Console, Reference List**

| Reference    | Description                                                         | Model Machine     |
|--------------|---------------------------------------------------------------------|-------------------|
| EL-00291     | Electrical Console Assy (3PE~400V, 3 Phase Motor, for PLC & Logger) | <b>G-Connect</b>  |
| EL-00317     |                                                                     | <b>G-Connect+</b> |
| EL-00291-230 | Electrical Console Assy (3PE~230V, 3 Phase Motor, for PLC & Logger) | <b>G-Connect</b>  |
| EL-00317-230 |                                                                     | <b>G-Connect+</b> |

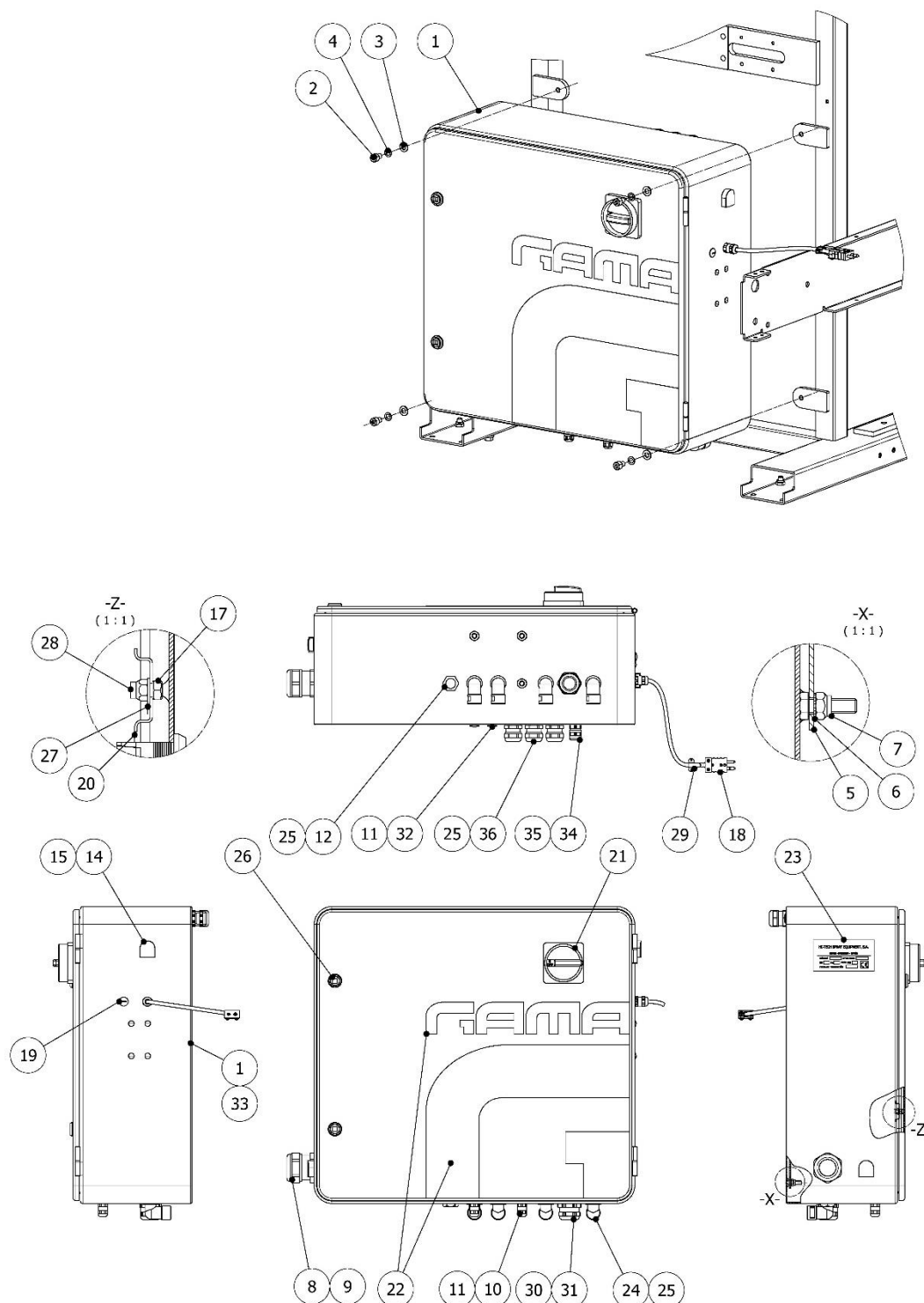
**Table 11. Flow Meters Kits**

| Reference     | Description                                    | Model Machine     |
|---------------|------------------------------------------------|-------------------|
| KT-00200 ①    | Flow Meters Kit (Spare Part)                   | <b>G-Connect</b>  |
|               |                                                | <b>G-Connect+</b> |
| KT-200-ASSY ② | Flow Meters Kit (factory assembled on machine) | <b>G-Connect</b>  |
|               |                                                | <b>G-Connect+</b> |

① Order only as a spare part.

② Order only for new machines.

## ELECTRICAL COMPONENT CABINET



**Figure 1. Electrical Component Cabinet, "G-Connect" and "G-Connect+"**



**Table 12. Electrical Component Cabinet, "G-Connect" and "G-Connect+", Parts List**

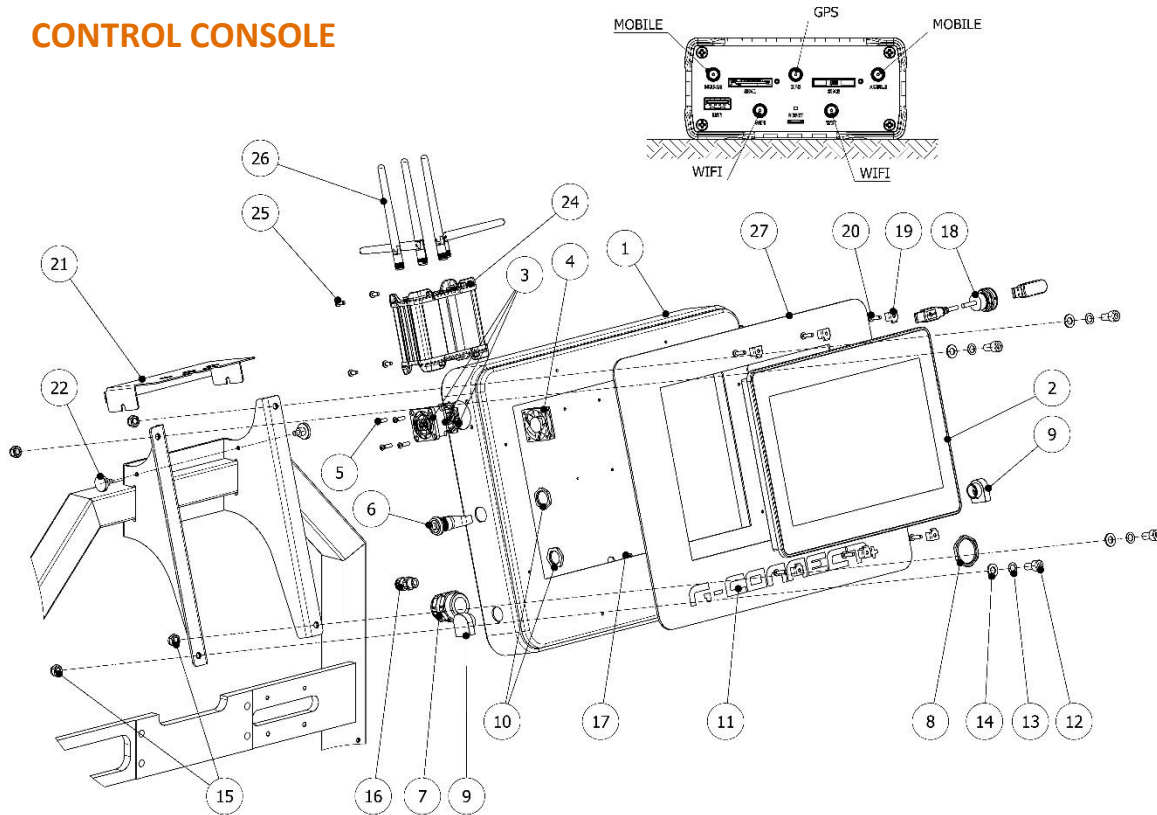
| Item | Description               | Part Number | Qty. |
|------|---------------------------|-------------|------|
| 1    | Finished Cabinet Box      | EL-00291-02 | 1    |
| 2    | Allen Cap Screw           | TN-00186    | 4    |
| 3    | Washer                    | TN-00119    | 4    |
| 4    | Washer                    | TN-00038    | 4    |
| 5    | Plain Mounting Plate      | EL-00291-A  | 1    |
| 6    | Washer                    | TN-00024    | 4    |
| 7    | Lock Nut                  | TN-00476    | 4    |
| 8    | Cable Gland               | EL-00088-04 | 1    |
| 9    | Nut                       | EL-00090-05 | 1    |
| 10   | Cable Gland               | EL-00088-00 | 4    |
| 11   | Nut                       | EL-00090-00 | 6    |
| 12   | Plug                      | EL-00088-03 | 1    |
| 13   |                           |             |      |
| 14   | Airing Grille             | EL-00158-05 | 2    |
| 15   | Nut (included in Item 14) | -           | -    |
| 16   | Rivet                     | TN-00240    | 4    |
| 17   | Nut                       | TN-00107    | 3    |
| 18   | Male Connector Type E     | EL-00096-84 | 1    |
| 19   | Plug                      | EL-00183    | 1    |
| 20   | 35 DIN Rail               | EL-00106-00 | 0,47 |
| 21   | Main Switch               | EL-00107-18 | 1    |
|      | Selector Handle, Red/Ylw  | EL-00107-19 | 1    |
| 22   | Vinyl                     | EM-00114-02 | 1    |
| 23   | ID Plate                  | -           | 2    |
| 24   | 90° Elbow Cable Gland     | EL-00087-01 | 4    |
| 25   | Nut                       | EL-00090-01 | 8    |



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| Item | Description             | Part Number | Qty. |
|------|-------------------------|-------------|------|
| 26   | Door Lock Set           | EL-00034    | 2    |
| 27   | Washer                  | TN-00103    | 3    |
| 28   | Lock Nut                | TN-00486    | 3    |
| 29   | Cable Clip              | EL-00096-86 | 1    |
| 30   | Cable Gland             | EL-00088-01 | 1    |
| 31   | Nut                     | EL-00090-03 | 1    |
| 32   | Plug                    | EL-00183    | 2    |
| 33   | Rubber Seal (not shown) | EL-00001-06 | 2 m  |
| 34   | Cable Gland             | EL-00088-05 | 1    |
| 35   | Nut                     | EL-00090-06 | 1    |
| 36   | Cable Gland             | EL-00088-02 | 3    |

## CONTROL CONSOLE



**Figure 2. Control Console "G-Connect" and "G-Connect+"**

**Table 13. Control Console "G-Connect" and "G-Connect+", Parts List**

| Item | Description                      | Part Number | Qty. |
|------|----------------------------------|-------------|------|
| 1    | Cabinet Box with Hinged Door     | EL-00293-01 | 1    |
| 2    | Touch Screen 12"                 | EL-00331    | 1    |
| 3    | Airing Grille Assy (with Filter) | EL-00132-02 | 1    |
| 4    | Fan                              | EL-00133-03 | 1    |
| 5    | Countersunk Cap Screw            | TN-00487    | 4    |
| 6    | Lock Set                         | EL-00034    | 1    |
| 7    | Cable Gland                      | EL-00088-01 | 1    |
| 8    | Nut                              | EL-00090-03 | 1    |



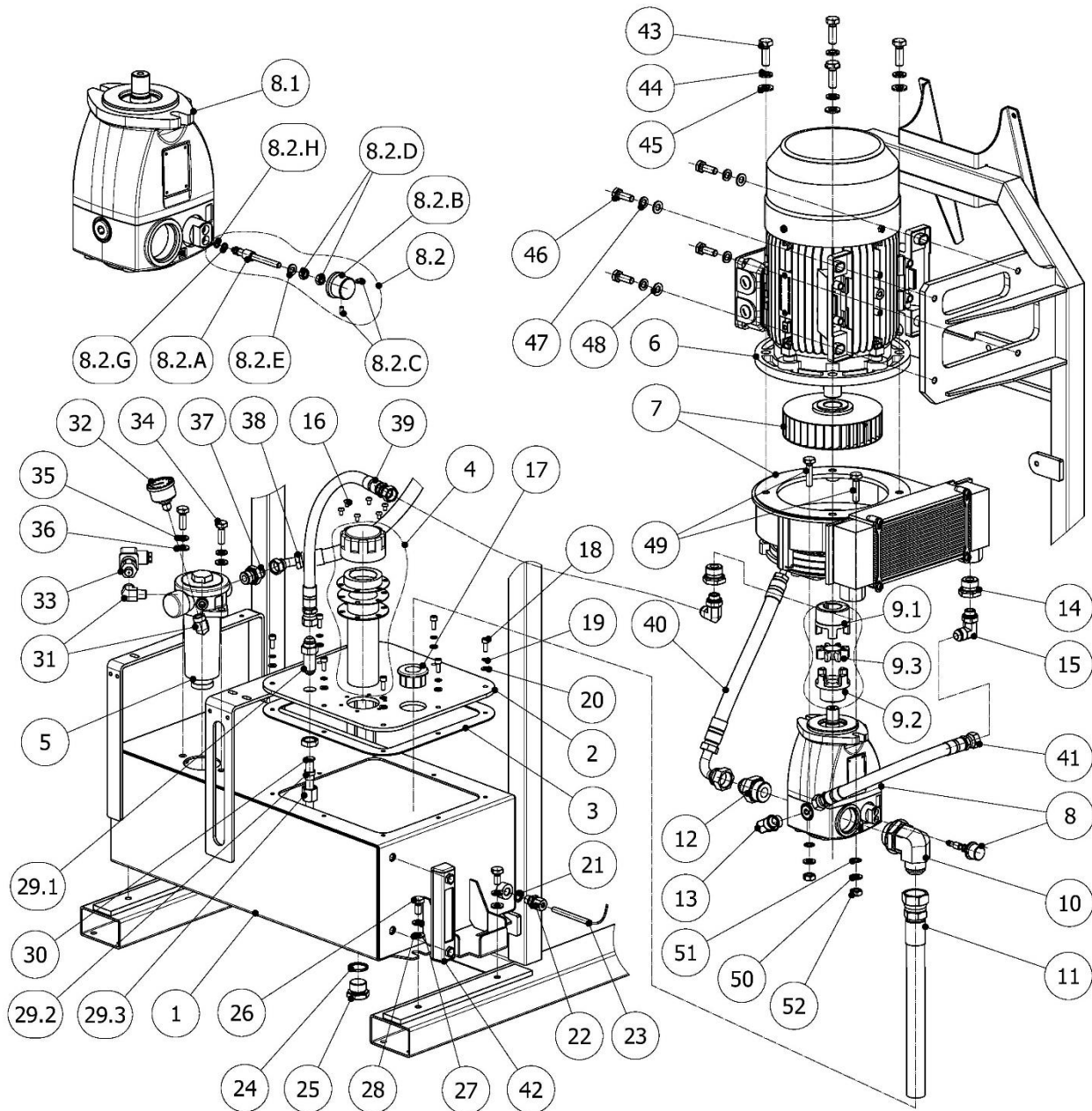
**"G-Connect" and "G-Connect+"**  
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| Item   | Description                                       | Part Number | Qty.  |
|--------|---------------------------------------------------|-------------|-------|
| 9      | Airing Grille                                     | EL-00158-05 | 2     |
| 10     | Nut (included in Item.9)                          | -           | -     |
| 11(#)  | Vinyl "G- Connect"                                | EM-00115    | 1     |
|        | Vinyl "G-Connect+"                                | EM-00116    |       |
| 12     | Allen Cap Screw                                   | TN-00186    | 4     |
| 13     | Washer                                            | TN-00038    | 4     |
| 14     | Washer                                            | TN-00119    | 4     |
| 15     | Lock Nut                                          | TN-00283    | 4     |
| 16     | Cable Gland                                       | EL-00088-00 | 1     |
| 17     | Nut                                               | EL-00090-00 | 1     |
| 18     | USB                                               | EL-00078-06 | 1     |
| 19     | Bracket                                           | -           | 6     |
| 20     | Screw Bracket                                     | -           | 6     |
| 21     | Router Cover                                      | MQ-21014    | 1     |
| 22     | Cover Screw                                       | TN-00221    | 2     |
| 23     |                                                   |             |       |
| 24     | Router                                            | EL-00332    | 1     |
| 25     | Router Screw                                      | TN-00239    | 4     |
| 26     | Antenna Kit GPS, WIFI & DATA (Include in Item 24) | -           | -     |
| 27     | Screen Frame                                      | EL-00334    | 1     |
| 28 (*) | Rubber Seal                                       | EL-00001-06 | 1.5 m |

**(#) Parts not marked on the drawing.**

**(\*) Parts not marked on the drawing.**

**HYDRAULIC POWER UNIT 4kW/5kW 3PE~400V 50/60Hz (18/28 cc hyd. Pump)**



**Figure 3. Hydr. Power Unit 3PE~400V 50/60Hz, 4kW/5kW Motor (with 18/28cc Pump)**



**"G-Connect" and "G-Connect+"**  
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**Table 14. Hydr. Power Unit 3PE~400V 50/60Hz, 4kW/5kW Motor (with 18/28cc Pump), Parts List**

| Item  | Description                                              | Part Number   | Qty.  |
|-------|----------------------------------------------------------|---------------|-------|
| 1     | Hydraulic Tank Assembly 28L                              | MQ-21002-00   | 1     |
| 2     | Hyd. Tank Cover, Motor 4kW/5.5kW, 18/28cc Pump           | MQ-21013-02   | 1     |
| 3     | Inspection Cover Gasket                                  | MQ-21004      | 1     |
| 4     | Filling Filter Plug                                      | HI-00002      | 1     |
| 5     | Hyd. Return Filter                                       | HI-00123      | 1     |
| 6     | Motor 4kW 400v 50/60Hz                                   | EL-00138-04   | 1     |
|       | Motor 5.5kW 400v 50/60Hz                                 | EL-00138-01   |       |
| 7     | Bell Housing with oil Cooling, Motor 4kW/5.5kW - 18/28cc | HI-00210      | 1     |
| 8     | 18cc Pump Assembly with Pressure Regulator               | HI-00190-G30H | 1     |
|       | 28cc Pump Assembly with Pressure Regulator               | HI-00238-G50H |       |
| 8.1   | Pump 18cc                                                | HI-00190      | 1 (°) |
|       | Pump 28cc                                                | HI-00238-00   |       |
| 8.2   | Pressure Regul. Assembly 18/28cc                         | HI-00149-00   | 1 (°) |
| 8.2.A | Pressure Regul. bolt 18/28cc (without gaskets and nut)   | HI-00149-01   | 1 (@) |
| 8.2.B | Pressure Regul. knob 18/28cc                             | GU-02007      | 1 (@) |
| 8.2.C | Lock Pin 18/28cc                                         | TN-00099      | 2 (@) |
| 8.2.D | Stop Nut 18/28cc                                         | TN-00108      | 2 (@) |
| 8.2.E | Washer 18/28cc                                           | TN-00024      | 1 (@) |
| 8.2.F |                                                          |               |       |
| 8.2.G | Anti-Extrusion Ring (supplied with pump)                 | (*)           | 1     |
| 8.2.H | O-Ring (supplied with pump)                              | (*)           | 1     |

**(°) Parts included in Item 8.**

**(@)Parts included in Item 8.2**



| Item | Description                  | Part Number | Qty.   |
|------|------------------------------|-------------|--------|
| 9    | Elastic Coupling Assembly    | HI-00046-00 | 1      |
| 9.1  | 4kW/5.5kW Motor Side Bushing | HI-00006-02 | 1 (&)  |
| 9.2  | 18/28cc Pump Side Bushing    | HI-00046-01 | 1 (&)  |
| 9.3  | Spidex                       | HI-00006-01 | 1 (&)  |
| 10   | Elbow 90°                    | RA-00568    | 1      |
| 11   | Aspiration Hose              | MA-00232    | 1      |
| 12   | Male Union                   | RA-00500    | 1      |
| 13   | Swivel Elbow 90°             | RA-00058    | 1      |
| 14   | Reduction                    | RA-00260    | 2      |
| 15   | Swivel Elbow 90°             | RA-00558    | 2      |
| 16   | ULS Cap Screw                | TN-00166    | 6      |
| 17   | Rubber Bulkheads             | HI-00140    | 1      |
| 18   | Allen Cap Screw              | TN-00026    | 8      |
| 19   | Washer                       | TN-00025    | 8      |
| 20   | Washer                       | TN-00024    | 8      |
| 21   | Metal O-ring                 | OR-00054    | 1      |
| 22   | Fitting                      | RA-00231    | 1      |
| 23   | Temperature Probe            | EL-00156-01 | 1      |
| 24   | Metal O-ring                 | OR-00082    | 1      |
| 25   | Plug                         | RA-00022    | 1      |
| 26   | Hex. Cap Screw               | TN-00465    | 4      |
| 27   | Lock Washer                  | TN-00087    | 4      |
| 28   | Washer                       | TN-00162    | 4      |
| 29   | Bulkhead Assy                | RA-00060    | 1      |
| 29.1 | Bulkhead                     | RA-00172    | 1 (\$) |
| 29.2 | Ferrule                      | RA-00173    | 1 (\$) |
| 29.3 | Nut Ferrule                  | RA-00174    | 1 (\$) |

**(\$)** Parts included in Item 29.

**(&)** Parts included in Item 9

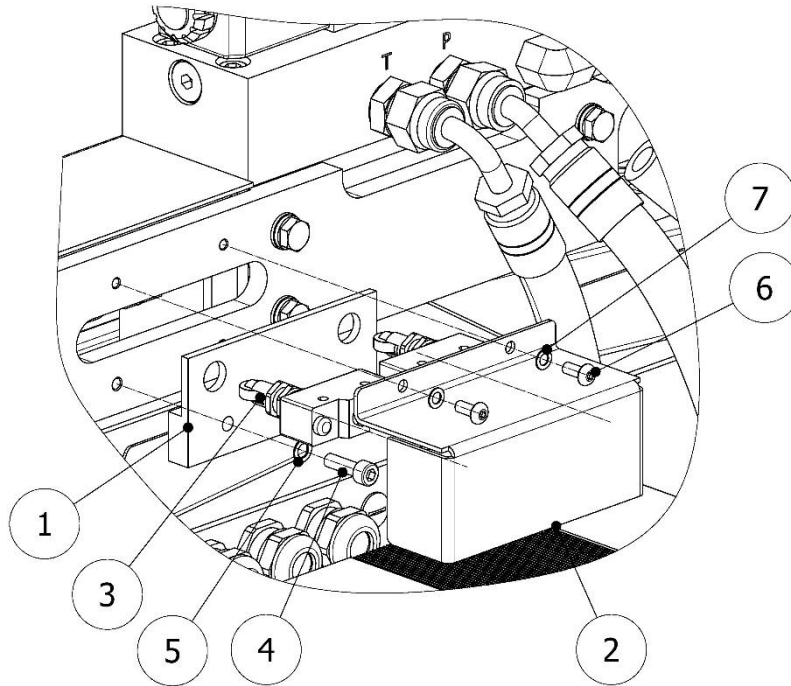


**"G-Connect" and "G-Connect+"**  
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| Item | Description                                | Part Number | Qty.       |
|------|--------------------------------------------|-------------|------------|
| 30   | Drainpipe                                  | HI-00212    | 1          |
| 31   | Elbow 90° Male-Female                      | RA-00416    | 1+1<br>(#) |
| 32   | Safety Pressure Gauge (included in Item.5) | HI-00123    | 1          |
| 33   | Safety Pressure Switch (OPTIONAL)          |             | 1          |
| 34   | Hex. Cap Screw                             | TN-00163    | 2          |
| 35   | Lock Washer                                | TN-00087    | 2          |
| 36   | Washer                                     | TN-00162    | 2          |
| 37   | Male Union                                 | RA-00316    | 1          |
| 38   | Return Hose                                | HI-00213    | 1          |
| 39   | Return Drain Hose                          | HI-00214    | 1          |
| 40   | Pressure Hose                              | HI-00215    | 1          |
| 41   | Drain Hose Pump                            | HI-00216    | 1          |
| 42   | Hyd. Level / Thermometer                   | HI-00001    | 1          |
| 43   | Hex. Cap Screw                             | TN-00199    | 4          |
| 44   | Lock Washer                                | TN-00039    | 4          |
| 45   | Washer                                     | TN-00040    | 4          |
| 46   | Hex. Cap Screw                             | TN-00129    | 4          |
| 47   | Lock. Washer                               | TN-00087    | 4          |
| 48   | Washer                                     | TN-00162    | 4          |
| 49   | Hex. Cap Screw                             | TN-00392    | 2          |
| 50   | Lock Washer                                | TN-00145    | 2          |
| 51   | Washer                                     | TN-00162    | 2          |
| 52   | Hex. Nut                                   | TN-00105    | 2          |

**(#) 1 piece standard version and one piece for optional mounting.**

## REVERSING SWITCH UNIT

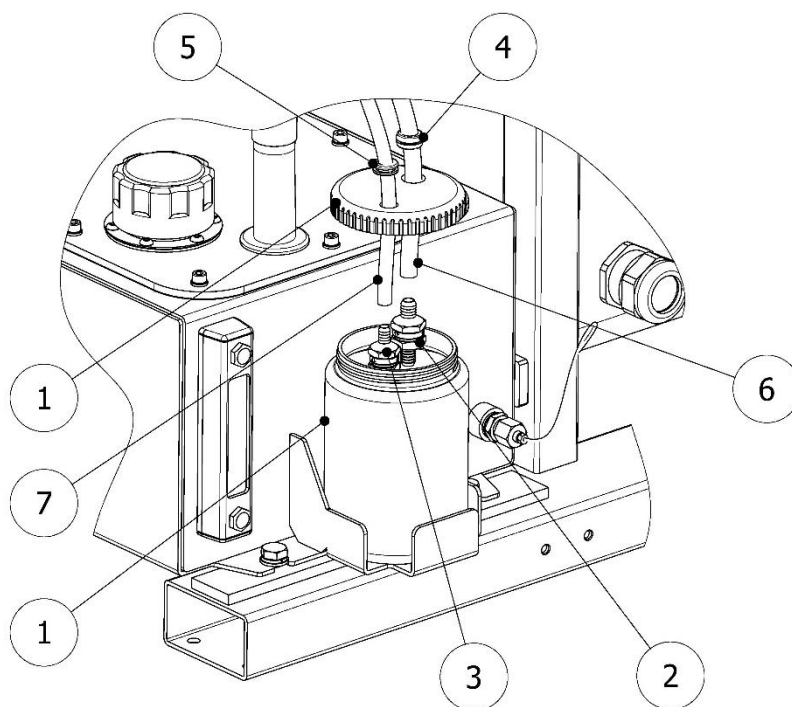


**Figure 4. Reversing Switch Unit**

**Table 15. Reversing Switch Unit, Parts List**

| Item | Description                    | Part Number | Qty. |
|------|--------------------------------|-------------|------|
| 1    | Reversing Switch Support       | MQ-01005    | 1    |
| 2    | Reversing Switch Cover         | MQ-01006    | 1    |
| 3    | Reversing Switch (with 2 nuts) | EL-00020    | 2    |
| 4    | Allen Cap Screw                | TN-00026    | 2    |
| 5    |                                |             |      |
| 6    | ULS Cap Screw                  | TN-00166    | 2    |
| 7    |                                |             |      |

## LUBE RESERVOIR UNIT



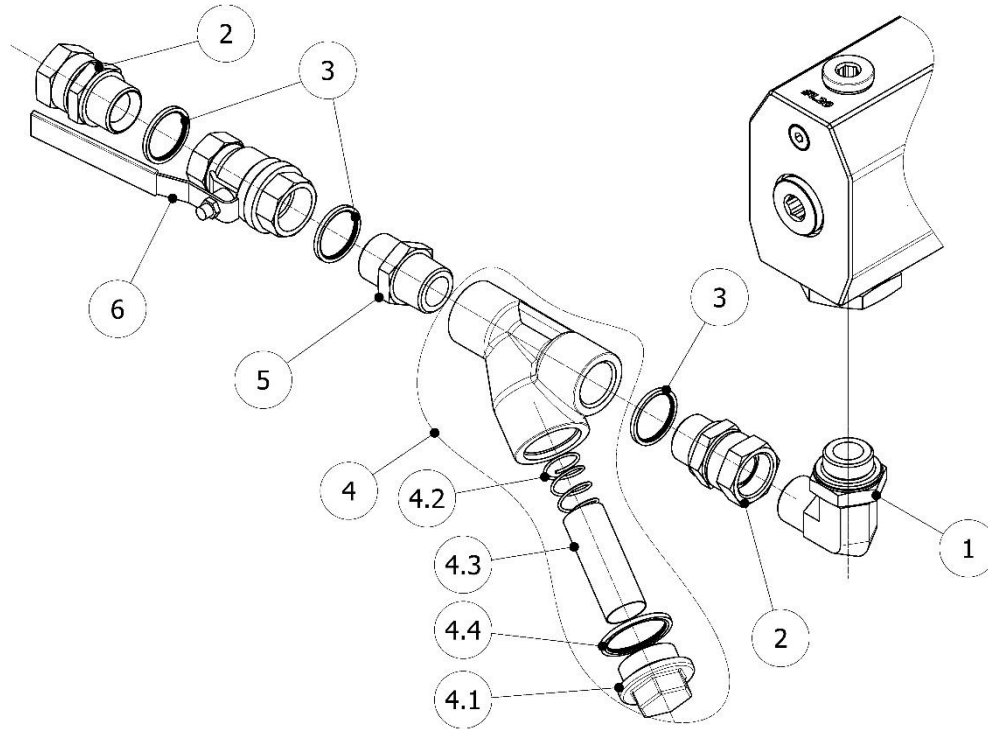
**Figure 5. Lube Reservoir Unit**

**Table 16. Lube Reservoir Unit, Parts List**

| Item | Description                                | Part Number | Qty. |
|------|--------------------------------------------|-------------|------|
| 1    | Lube Reservoir Bottle with Drilled Cap (*) | MQ-01009-01 | 1    |
| 2    | Lube Reservoir Check Valve for Pipe 12x1   | RA-00068    | 1    |
| 3    | Lube Reservoir Check Valve for Pipe 10x1   | RA-00283    | 1    |
| 4    | Rubber Grommet                             | EL-00095-03 | 1    |
| 5    | Rubber Grommet                             | EL-00095-01 | 1    |
| 6    | Supply Line                                | MA-00025    | 1    |
| 7    | Return Line                                | MA-00024    | 1    |

**(\*) The tank and cover Item.1 are indivisible, they cannot be supplied separately.**

## PRODUCT INLET STANDARD VERSION



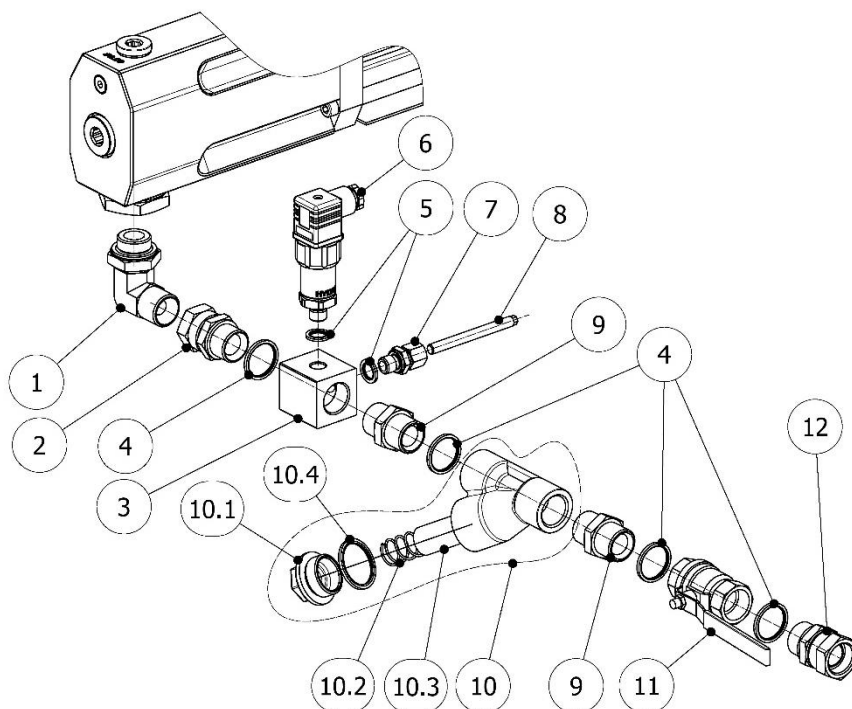
**Figure 6. Product Inlet Standard Version**

**Table 17. Product Inlet Standard Version, Parts List**

| Item | Description      | Part Number    | Qty. |
|------|------------------|----------------|------|
| 1    | Swivel Elbow 90° | RA-00072       | 2    |
| 2    | Swivel Union     | RA-00073       | 4    |
| 3    | Metal O-ring     | OR-00082       | 6    |
| 4    | "Y" Filter       | RA-00074-00    | 2    |
| 4.1  | Filter Plug      | RA-00074-01    | 2    |
| 4.2  | Filter Spring    | SP-00017       | 2    |
| 4.3  | Filter Mesh      | RA-00074-03-30 | 2    |
| 4.4  | Filter O-ring    | OR-00061       | 2    |
| 5    | Male Union       | RA-00143       | 2    |
| 6    | Ball Valve       | RA-00078       | 2    |

**Valid for both products inlet.**

**PRODUCT INLET MONITORED VERSION**



**Figure 7. Product Inlet Monitored Version**



**Table 18. Product Inlet Monitored Version, Parts List**

| Item | Description         | Part Number    | Qty. |
|------|---------------------|----------------|------|
| 1    | Swivel Elbow 90°    | RA-00072       | 2    |
| 2    | Swivel Union        | RA-00073       | 2    |
| 3    | Sensor Block        | MQ-21003       | 2    |
| 4    | Metal O-ring        | OR-00082       | 8    |
| 5    | Metal O-ring        | OR-00054       | 4    |
| 6    | Pressure Transducer | HI-00033       | 2    |
| 7    | Fitting             | RA-00231       | 2    |
| 8    | Temperature Probe   | EL-00156-01    | 2    |
| 9    | Male Union          | RA-00143       | 4    |
| 10   | "Y" Filter          | RA-00074-00    | 2    |
| 10.1 | Filter Plug         | RA-00074-01    | 2    |
| 10.2 | Filter Spring       | SP-00017       | 2    |
| 10.3 | Filter Mesh         | RA-00074-03-30 | 2    |
| 10.4 | Filter O-ring       | OR-00061       | 2    |
| 11   | Ball Valve          | RA-00078       | 2    |
| 12   | Swivel Union        | RA-00073       | 2    |

**Valid for both product inlet. Quantities are totals per machine.**



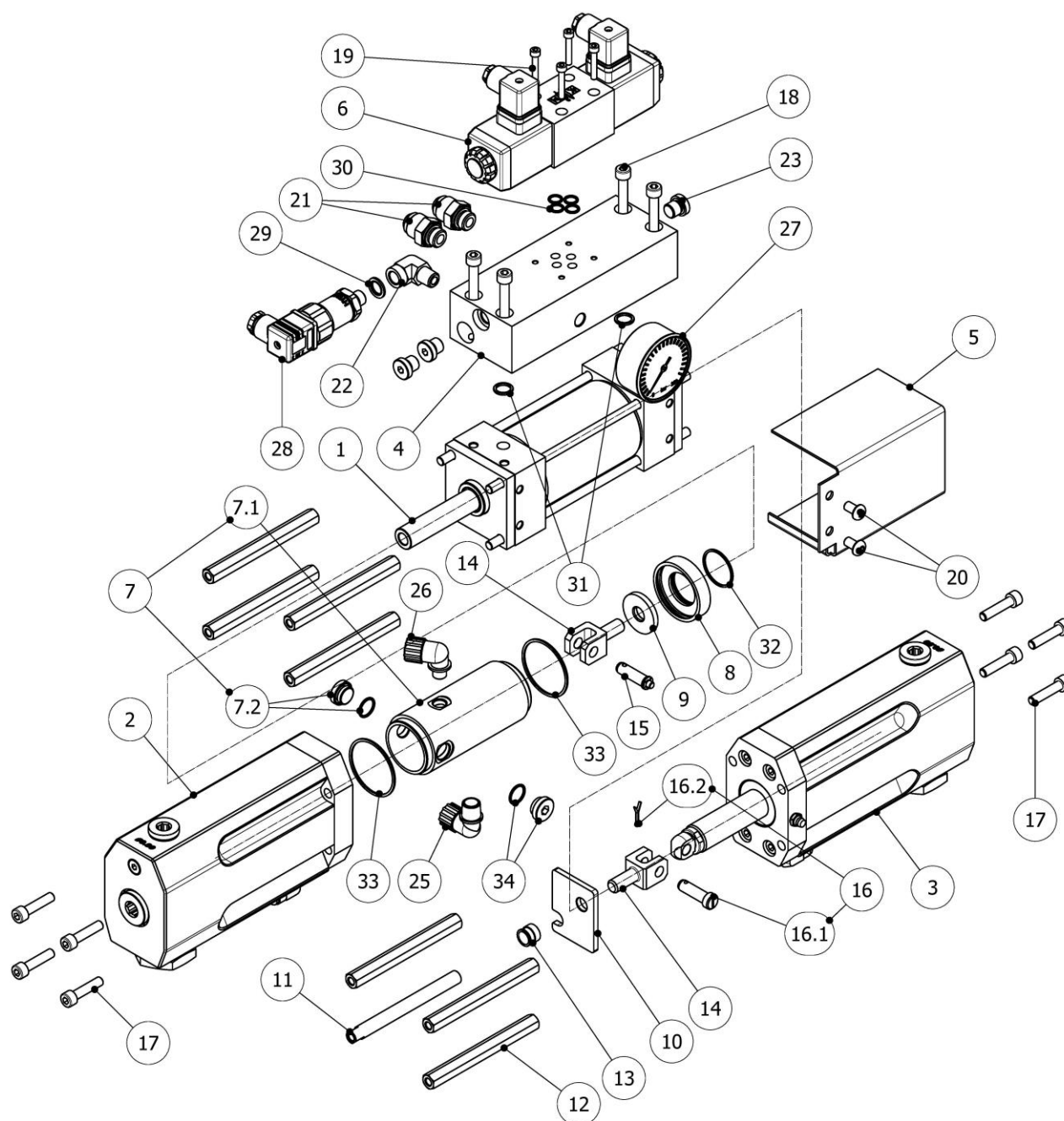
**Table 19. Product Inlet Kits**

| Reference     | Description                                                                  | Model Machine            |
|---------------|------------------------------------------------------------------------------|--------------------------|
| KT-00201 ①    | Temperature and Pressure inlet control kit<br>(Spare Part)                   | <b><i>G-Connect</i></b>  |
|               |                                                                              | <b><i>G-Connect+</i></b> |
| KT-201-ASSY ② | Temperature and Pressure inlet control kit<br>(factory assembled on machine) | <b><i>G-Connect</i></b>  |
|               |                                                                              | <b><i>G-Connect+</i></b> |

① Order only as a spare part.

② Order only for new machines.

## **PUMP LINE ASSEMBLY**



**Figure 8. Pump Line Assembly**



***Table 20. Pump Line Assembly, Parts List***

| Item | Description                                      | Part Number  | Qty. |
|------|--------------------------------------------------|--------------|------|
| 1    | Hydraulic Cylinder                               | HI-00101-00  | 1    |
| 2    | "A" Isocyanate Proportioning Pump                | See Table 21 | 1    |
| 3    | "R" Resin Proportioning Pump                     | See Table 21 | 1    |
| 4    | Hydr. Manifold (STANDARD)                        | MQ-01007     | 1    |
| 5    | Activator Plate Protection Cover                 | PU-01027     | 1    |
| 6    | Directional Valve                                | HI-00054     | 1    |
| 7    | ISO Pump Lubricator Jacket Assy                  | PU-01018     | 1    |
| 7.1  | ISO Pump Lubricator Jacket                       | PU-01018M    | 1    |
| 7.2  | Al. Plug with o-ring                             | RA-00116     | 1    |
| 8    | Lube Cylinder Adapter Plate                      | PU-01021     | 1    |
| 9    | Baffle                                           | PU-01019     | 1    |
| 10   | Reversion Switch Activation Plate                | PU-01023     | 1    |
| 11   | Bushing Guide Spacer                             | PU-01026     | 1    |
| 12   | Cylinder Spacer                                  | PU-01025     | 7    |
| 13   | Bushing                                          | PU-01022     | 1    |
| 14   | Cylinder Axle Fork                               | PU-01043     | 2    |
| 15   | Pin Assembly, ISO Pump (incl.15.1+15.2+15.3)     | PU-01044-00  | 1    |
| 15.1 | Clevis Pin (included in Pos.15)                  | PU-01044-01M | 1    |
| 15.2 | Lock Washer (included in Pos.15)                 | TN-00136     | 1    |
| 15.3 | Washer (included in Pos.15)                      | TN-00024     | 1    |
| 16   | Clevis Pin Assembly, Resin Pump (incl.16.1+16.2) | PU-01045-00  | 1    |
| 16.1 | Clevis Pin (included in Pos.16)                  | PU-01045-01  | 1    |
| 16.2 | Split Pin (included in Pos.16)                   | TN-00077     | 1    |
| 17   | Allen Cap Screw                                  | TN-00245     | 8    |
| 18   | Allen Cap Screw                                  | TN-00090     | 4    |



| Item | Description                    | Part Number | Qty. |
|------|--------------------------------|-------------|------|
| 19   | Screw                          | TN-00148    | 4    |
| 20   | ULS Cap Screw                  | TN-00135    | 2    |
| 21   | Male Union                     | RA-00062    | 2    |
| 22   | Swivel Elbow 90° (OPTIONAL)    | RA-00416    | 1    |
| 23   | Plug                           | RA-00013    | 3    |
| 24   |                                |             |      |
| 25   | Plastic Swivel Elbow           | RA-00489    | 1    |
| 26   | Plastic Swivel Elbow           | RA-00066    | 1    |
| 27   | Hydr. Pressure Gauge           | HI-00078    | 1    |
| 28   | Pressure Transducer (OPTIONAL) | HI-00033    | 1    |
| 29   | Metal O-ring (OPTIONAL)        | OR-00054    | 1    |
| 30   | O-Ring                         | OR-00035    | 4    |
| 31   | O-Ring                         | OR-00019    | 2    |
| 32   | O-Ring                         | OR-00021    | 1    |
| 33   | O-Ring                         | OR-00020    | 2    |
| 34   | Al. Plug with o-ring           | RA-00116    | 1    |

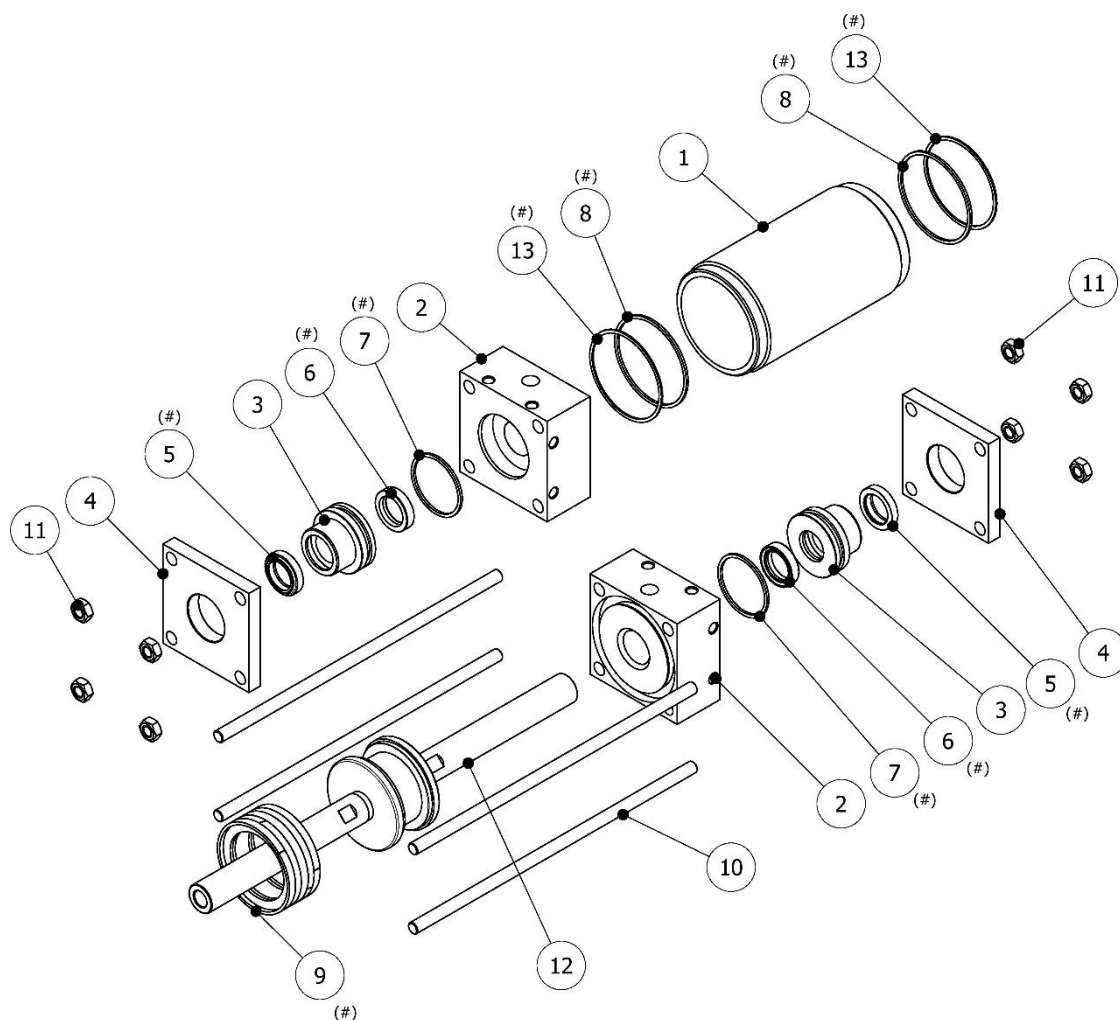
**OPTIONAL parts only upon express request.**

**Table 21. Proportioning Pump Size, Parts List**

| SIZE | Proportioning Pump Size |                   |
|------|-------------------------|-------------------|
|      | item 2 (ISO Pump)       | item 3 (POL Pump) |
| 1.20 | PU-06401-012G           | PU-06402-012G     |
| 0.80 | PU-06401-008G           | PU-06402-008G     |

**Note: (\*) The standard proportioning pump size is #1.20. Different sizes are available under order. For delivery time, please consult with marketing department.**

## HYDRAULIC CYLINDER



**Figure 9. Hydraulic Cylinder**

**Note:** The indicated parts (#) are included in the repair seal kit KT-00010-01.



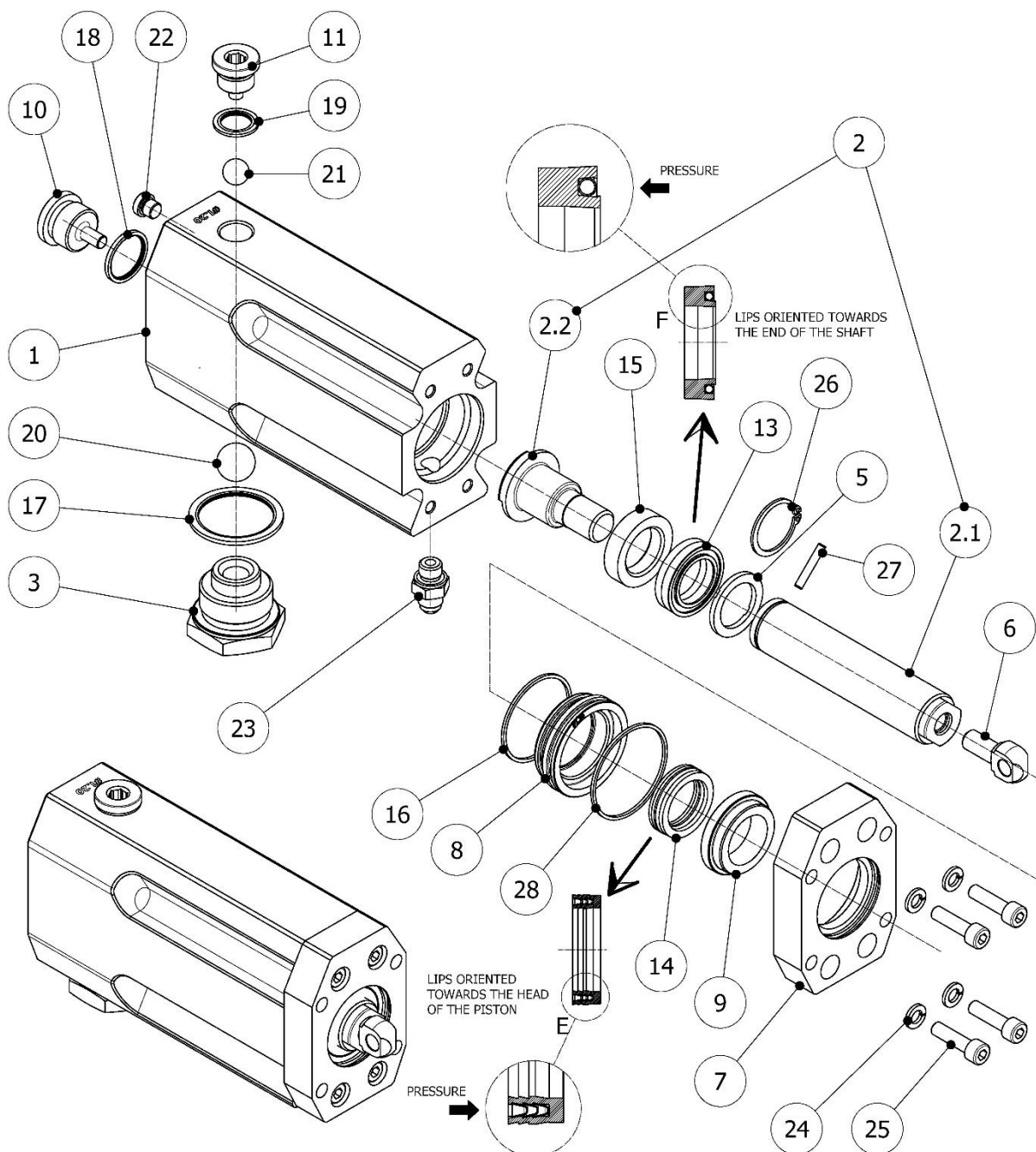
**Table 22. Hydraulic Cylinder, Parts List**

| Item | Description                | Part Number | Qty.  |
|------|----------------------------|-------------|-------|
| 1    | Cylinder Body              | HI-00025-05 | 1     |
| 2    | Port Block                 | HI-00101-04 | 2     |
| 3    | Rod Bushing                | HI-00101-03 | 2     |
| 4    | Front Plate                | HI-00025-02 | 2     |
| 5    | Rod Wiper                  | OR-00095    | 2 (#) |
| 6    | Shaft Seal                 | OR-00096    | 2 (#) |
| 7    | O-Ring                     | OR-00039    | 2 (#) |
| 8    | O-Ring                     | OR-00040    | 2 (#) |
| 9    | Piston O-Ring              | OR-00041-00 | 1 (#) |
| 10   | Hydraulic Cylinder Tie Rod | HI-00025-06 | 4     |
| 11   | Nut (*)                    | TN-00029    | 8     |
| 13   | O-Ring Anti Extrusion      | OR-00063    | 2 (#) |
| 14   | Piston                     | HI-00101-01 | 1     |

***(\*) Only when the cylinder is supplied as a spare part. Not included in the Pump Line fitted in the machine.***

***The indicated parts (#) are included in the repair seal kit KT-00010-01.***

## **"A" PROPORTIONING PUMP ASSEMBLY**



**Figure 10. "A" Proportioning Pump Assembly**

**Table 23. "A" Proportioning Pump Assembly, Parts List**

| Item | Description                                | Part Number  | Qty.  |
|------|--------------------------------------------|--------------|-------|
| 1    | Body Pump with Check Valve Seat            | See Table 24 | 1     |
| 2    | Piston Rod Assembly (Only item. 2.1 y 2.2) | See Table 24 | 1     |
| 2.1  | Piston Rod (Included in item 2)            | See Table 24 | 1 (#) |
| 2.2  | Piston Head (Included in item 2)           | See Table 24 | 1 (#) |
| 3    | Inlet Ball Seat Assembly                   | PU-01003-OJ  | 1     |
| 4    |                                            |              |       |
| 5    | Piston Seal                                | See Table 24 | 1     |
| 6    | Pump Clevis                                | PU-01042     | 1     |
| 7    | Monobloc Flange Pump – ISO                 | NPU-06004    | 1     |
| 8    | Seat Seal – ISO                            | See Table 24 | 1     |
| 9    | Bearing ISO                                | See Table 25 | 1 (*) |
| 10   | Plug Side Pump                             | PU-01003-OE  | 1     |
| 11   | Upper Plug Pump                            | PU-01003-OF  | 1     |
| 12   |                                            |              |       |
| 13   | Piston Seal                                | See Table 25 | 1 (*) |
| 14   | Cylinder Seal                              | See Table 25 | 1 (*) |
| 15   | Piston Guide                               | See Table 25 | 1 (*) |
| 16   | O-Ring                                     | See Table 25 | 1 (*) |
| 17   | Metallic Ring                              | OR-00088     | 1     |
| 18   | Metallic Ring                              | OR-00082     | 1     |
| 19   | Metallic Ring                              | OR-00023     | 1     |
| 20   | Lower Ball                                 | TN-00013     | 1     |
| 21   | Upper Ball                                 | TN-00012     | 1     |
| 22   | Plug                                       | RA-00211     | 1     |
| 23   | Output Elbow                               | RA-00050     | 1     |

**NOTE:** The parts marked with (\*), are included in the repair seal kit of "A" pump (see Table 26).

**The parts marked with (#), are not supplied separately.**



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| Item | Description | Part Number  | Qty.  |
|------|-------------|--------------|-------|
| 24   | Washer      | TN-00028     | 4     |
| 25   | Allen Screw | TN-00062     | 4     |
| 26   | Seeger Ring | See Table 24 | 1     |
| 27   | Pin         | See Table 24 | 1     |
| 28   | O-Ring      | See Table 25 | 1 (*) |

**NOTE:** The parts marked with (\*), are included in the repair seal kit of "A" pump (see Table 26).

**Table 24. "A" Proportioning Pump Assembly, Parts List**

| Pump        | Item 1       | Item 2<br>(2.1 + 2.2) | Item 2.1     | Item 2.2     |
|-------------|--------------|-----------------------|--------------|--------------|
| <b>1.20</b> | PU-06001-012 | PU-01006-012          | PU-01007-012 | PU-01008-012 |
| <b>0.80</b> | PU-06001-008 | PU-01006-008          | PU-01007-008 | PU-01008-008 |

| Pump        | Item 5       | Item 8        | Item 26  | Item 27  |
|-------------|--------------|---------------|----------|----------|
| <b>1.20</b> | PU-01010-012 | PU-06009-012G | TN-00070 | TN-00086 |
| <b>0.80</b> | PU-01010-008 | PU-06009-008G | TN-00067 | TN-00085 |



**Table 25. Seals Monobloc "A" ISO Pump, Parts List**

| Item | 1.20          | 0.80          |
|------|---------------|---------------|
| 9    | PU-06007-012  | PU-06007-008  |
| 13   | PU-01016-012A | PU-01016-008A |
| 14   | PU-01017-012G | PU-01017-008G |
| 15   | PU-01014-012A | PU-01014-008A |
| 16   | OR-00009      | OR-00009      |
| 28   | OR-00115      | OR-00115      |

**Table 26. Repair Seal Kit "A" ISO Pump, Ref.List**

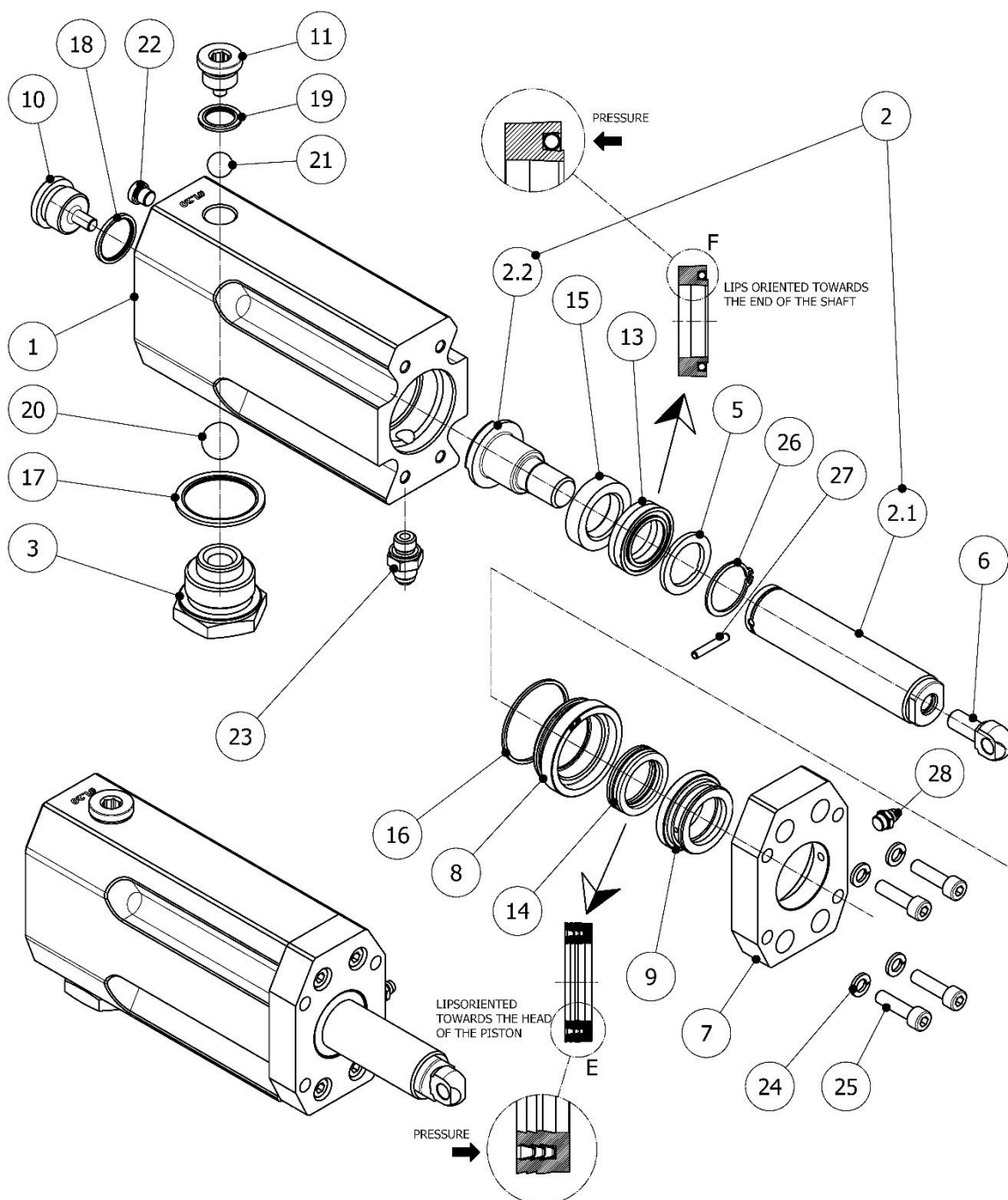
| Pump | Item     |
|------|----------|
| 1.20 | KT-00157 |
| 0.80 | KT-00159 |

**Note:**

**The standard proportioning pump sizes is #1.20. Different sizes are available under order. For delivery time, please consult with marketing department.**

**The Repair seal kit include the parts indicated in the Table 23.**

## **"R" PROPORTIONING PUMP ASSEMBLY**



**Figure 11. "R" Proportioning Pump Assembly**

**Table 27. "R" Proportioning Pump Assembly, Parts List**

| Item | Description                                | Part Number  | Qty.  |
|------|--------------------------------------------|--------------|-------|
| 1    | Body Pump with Check Valve Seat            | See Table 28 | 1     |
| 2    | Piston Rod Assembly (Only item. 2.1 y 2.2) | See Table 28 | 1     |
| 2.1  | Piston Rod (Included in item 2)            | See Table 28 | 1 (#) |
| 2.2  | Piston Head (Included in item 2)           | See Table 28 | 1 (#) |
| 3    | Inlet Ball Seat Assembly                   | PU-01003-OJ  | 1     |
| 4    |                                            |              |       |
| 5    | Piston Seal                                | See Table 28 | 1     |
| 6    | Pump Clevis                                | PU-01042     | 1     |
| 7    | Monobloc Flange Pump – POL                 | NPU-06005    | 1     |
| 8    | Seat Seal – POL                            | Ver Table 28 | 1     |
| 9    | Bearing ISO                                | Ver Table 29 | 1 (*) |
| 10   | Plug Side Pump                             | PU-01003-OE  | 1     |
| 11   | Upper Plug Pump                            | PU-01003-OF  | 1     |
| 12   |                                            |              |       |
| 13   | Piston Seal                                | See Table 29 | 1 (*) |
| 14   | Cylinder Seal                              | See Table 29 | 1 (*) |
| 15   | Piston Guide                               | See Table 29 | 1 (*) |
| 16   | O-Ring                                     | See Table 29 | 1 (*) |
| 17   | Metallic Ring                              | OR-00088     | 1     |
| 18   | Metallic Ring                              | OR-00082     | 1     |
| 19   | Metallic Ring                              | OR-00023     | 1     |
| 20   | Lower Ball                                 | TN-00013     | 1     |
| 21   | Upper Ball                                 | TN-00012     | 1     |
| 22   | Plug                                       | RA-00211     | 1     |

**Nota.:** The parts marked with (\*), are included in the repair seal kit of "R" (see Table 30).

The parts marked with (#), are not supplied separately.



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| Item | Description    | Part Number  | Qty. |
|------|----------------|--------------|------|
| 23   | Exit Elbow     | RA-00050     | 1    |
| 24   | Washer         | TN-00028     | 4    |
| 25   | Allen Screw    | TN-00062     | 4    |
| 26   | Seeger Ring    | See Table 28 | 1    |
| 27   | Pin            | See Table 28 | 1    |
| 28   | Grease Fitting | TN-00073     | 1    |

***Table 28. "R" Proportioning Pump Assembly, Parts List***

| Pump        | Item 1       | Item 2<br>(2.1 + 2.2) | Item 2.1     | Item 2.2     |
|-------------|--------------|-----------------------|--------------|--------------|
| <b>1.20</b> | PU-06001-012 | PU-01006-012          | PU-01007-012 | PU-01008-012 |
| <b>0.80</b> | PU-06001-008 | PU-01006-008          | PU-01007-008 | PU-01008-008 |

| Pump        | Item 5       | Item 8        | Item 26  | Item 27  |
|-------------|--------------|---------------|----------|----------|
| <b>1.20</b> | PU-01010-012 | PU-06006-012G | TN-00070 | TN-00086 |
| <b>0.80</b> | PU-01010-008 | PU-06006-008G | TN-00067 | TN-00085 |



**Table 29. Seals Monobloc "R" Resin Pump, Parts List**

| Ítem | 1.20          | 0.80          |
|------|---------------|---------------|
| 9    | PU-06008-012  | PU-06008-008  |
| 13   | PU-01016-012A | PU-01016-008A |
| 14   | PU-01017-012G | PU-01017-008G |
| 15   | PU-01014-012A | PU-01014-008A |
| 16   | OR-00009      | OR-00009      |

**Table 30. Repair Seal Kit "R" Resin Pump, Ref. List**

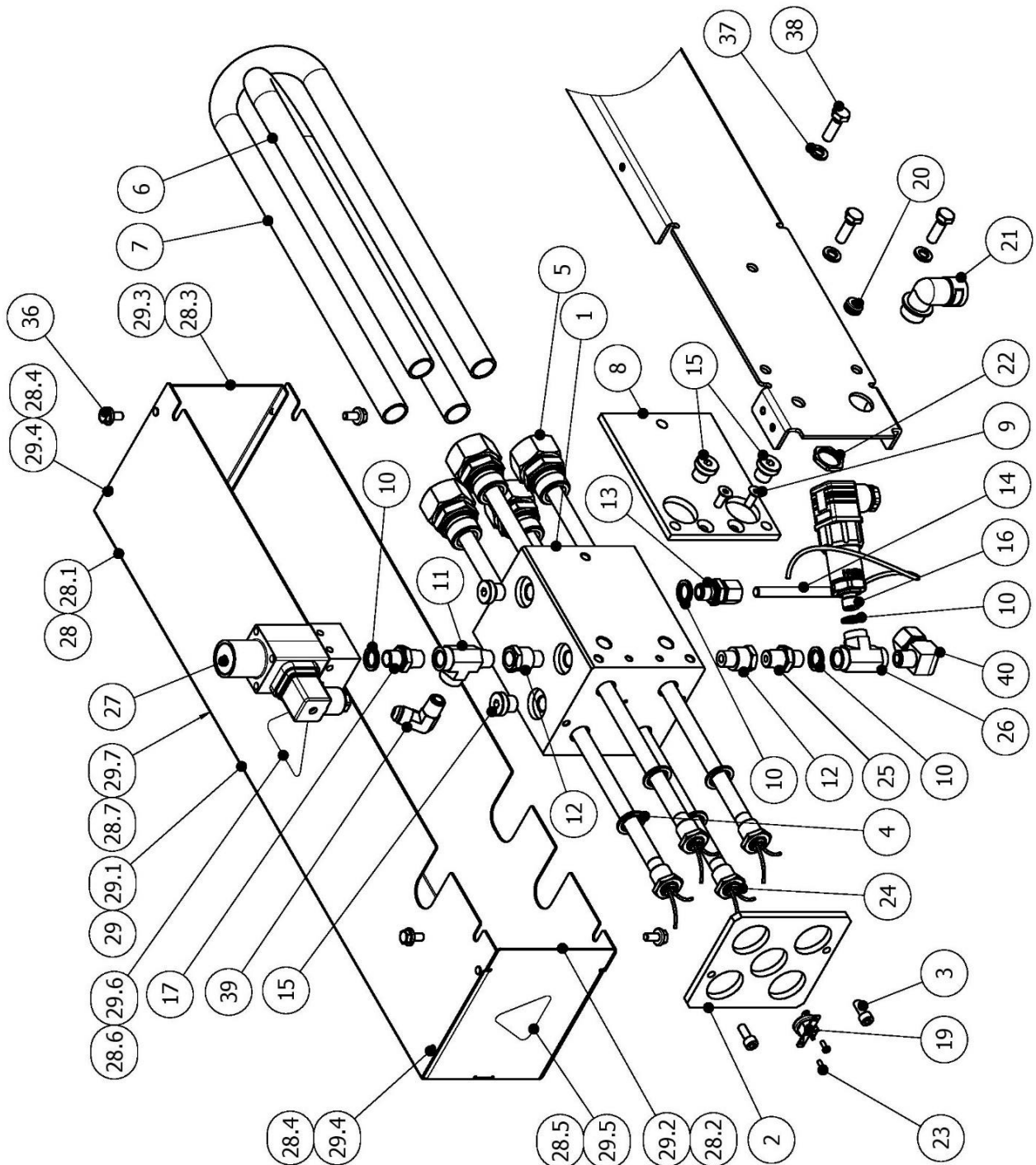
| Pump | Item     |
|------|----------|
| 1.20 | KT-00158 |
| 0.80 | KT-00160 |

**Note:**

**(#) The standard proportioning pump size is #1.20. Different sizes are available under order. For delivery time, please consult with marketing department.**

**The Repair seal kit include the parts indicated (\*) in the Table 27.**

## PRIMARY TUBE HEATER G-CONNECT



**Figure 12. Primary Tube Heater G-Connect**

**Table 31. Primary Tube Heater G-Connect, Parts List**

| Item | Description               | Part Number   | Qty. |
|------|---------------------------|---------------|------|
| 1    | Heater Block              | NCL-03001-02A | 1+1  |
| 2    | Front Insulate Plate      | NCL-03001-03A | 1+1  |
| 3    | Screw                     | TN-00061      | 2+2  |
| 4    | Metal O-Ring              | OR-00018      | 4+4  |
| 5    | Male Connector for Pipe   | RA-00468      | 4+4  |
| 6    | Short Pipe                | NCL-03001-06  | 1+1  |
| 7    | Long Pipe                 | NCL-03001-05  | 1+1  |
| 8    | Side Insulator Plate      | NCL-03001-04  | 1+1  |
| 9    | Screw                     | TN-00322      | 2+2  |
| 10   | Metal O-Ring              | OR-00054      | 4+4  |
| 11   | "T" Adapter               | RA-00018      | 1+1  |
| 12   | Extension Nipple          | RA-00077      | 2+2  |
| 13   | Fitting                   | RA-00231      | 1+1  |
| 14   | Temperature probe         | EL-00156-01   | 1+1  |
| 15   | Plug                      | RA-00013      | 4+4  |
| 16   | Pressure Transducer       | HI-00033      | 1+1  |
| 17   | Male Union                | RA-00138      | 1+1  |
| 18   |                           |               |      |
| 19   | Thermal Limit Switch      | EL-00006      | 1+1  |
| 20   | Grommet                   | EL-00095-00   | 1+1  |
| 21   | 90° Elbow for Cable Gland | EL-00087-01   | 1+1  |
| 22   | Nut                       | EL-00090-01   | 1+1  |
| 23   | Screw                     | TN-00128      | 2+2  |
| 24   | Resistance                | See Table 32  | 4+4  |
| 25   | Male Union                | RA-00138      | 1+1  |



***"G-Connect" and "G-Connect+"***  
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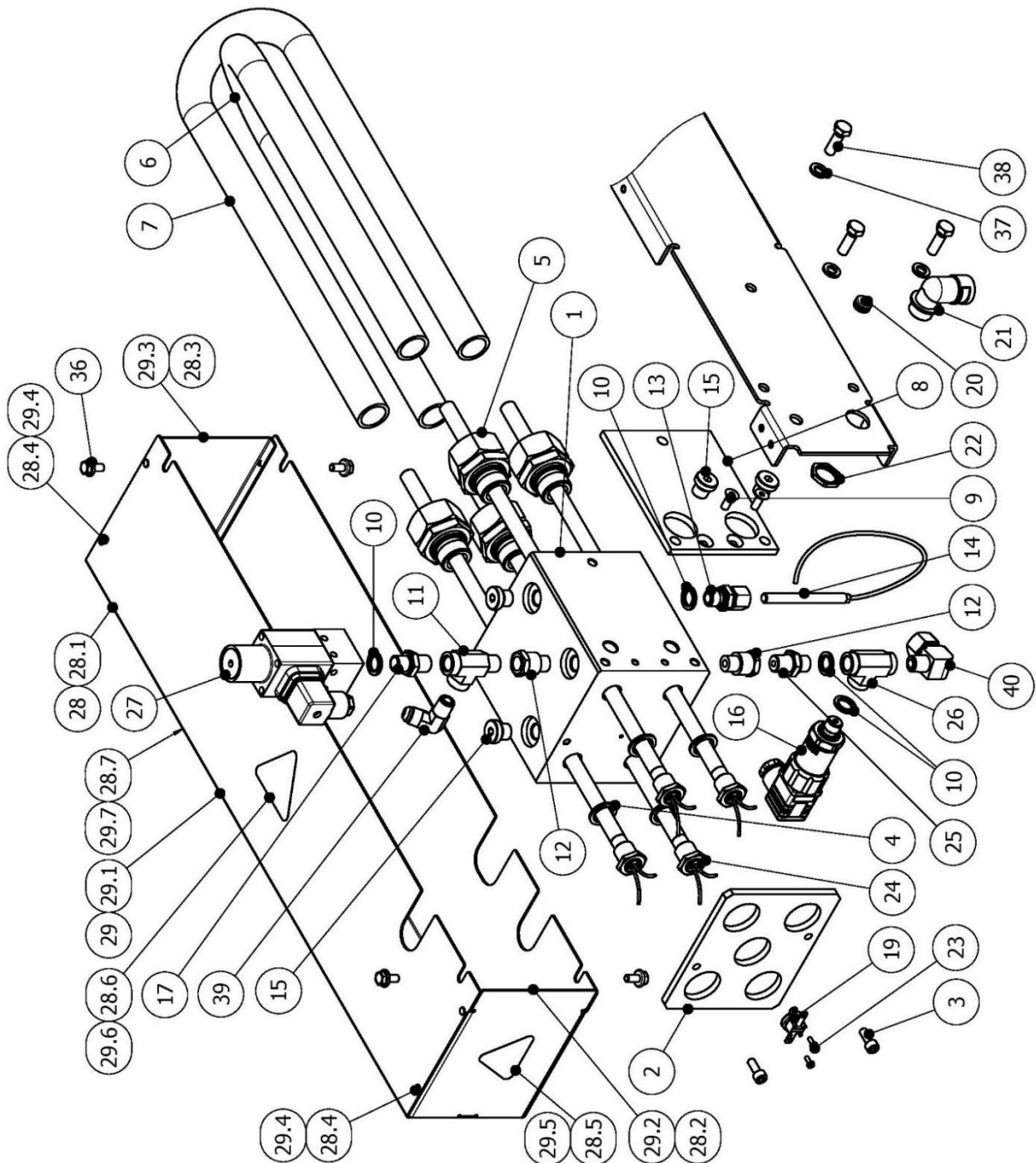
| Item | Description                                               | Part Number  | Qty. |
|------|-----------------------------------------------------------|--------------|------|
| 26   | "T" Adapter                                               | RA-00053     | 1+1  |
| 27   | Pressure Switch                                           | HI-00021     | 1+1  |
| 28   | Heater Protection Assy. (includes from Item.28.1 to 28.7) | CL-21001-01  | 1    |
| 28.1 | Heater Housing (included in item 28)                      | CL-21001-01A | 1    |
| 28.2 | Heater Front Cover (included in item 28)                  | CL-21001-01C | 1    |
| 28.3 | Heater Rear Cover (included in item 28)                   | CL-21001-01D | 1    |
| 28.4 | Rivet (included in item 28)                               | TN-00240     | 10   |
| 28.5 | Warning Voltage (included in item 28)                     | EM-00016     | 1    |
| 28.6 | Warning Temperature (included in item 28)                 | EM-00018     | 1    |
| 28.7 | G-Connect Tag (included in item 28)                       | EM-00117     | 1    |
| 29   | Heater Protection Assy. (includes from Item 29.1 to 29.7) | CL-21002-01  | 1    |
| 29.1 | Heater Housing (Included in Item 29)                      | CL-21002-01A | 1    |
| 29.2 | Heater Front Cover (included in Item 29)                  | CL-21001-01C | 1    |
| 29.3 | Heater Rear Cover (included in Item 29)                   | CL-21001-01D | 1    |
| 29.4 | Rivet (included in Item 29)                               | TN-00240     | 10   |
| 29.5 | Warning Voltage (included in Item 29)                     | EM-00016     | 1    |
| 29.6 | Warning Temperature (included in Item 29)                 | EM-00018     | 1    |
| 29.7 | G-Connect Tag (included in Item 29)                       | EM-00117     | 1    |
|      |                                                           |              |      |
| 35   | Washer                                                    | TN-00024     | 4+4  |
| 36   | Hex. Cap Screw                                            | TN-00438     | 4+4  |
| 37   | Lock Nut                                                  | TN-00028     | 3+3  |
| 38   | Hex. Cap Screw                                            | TN-00146     | 3+3  |
| 39   | Elbow Union 90°                                           | RA-00044     | 1+1  |
| 40   | Elbow Union 90° for Pipe                                  | RA-00038     | 1+1  |



***Table 32. Heater Resistances "G-Connect", Reference List***

| Item | Description                | Part Number | Qty. |
|------|----------------------------|-------------|------|
| 24   | Heat Resistance 400v 1500w | EL-00179    | 4+4  |
|      | Heat Resistance 230v 1500w | EL-00035    | 4+4  |

**PRIMARY TUBE HEATER G-CONNECT+**



**Figure 13. ISO and POL Primary Tube Heater "G-Connect+"**

**Table 33. Primary Tube Heater Component List "G-Connect+", Parts List**

| Item | Description             | Part Number  | Qty. |
|------|-------------------------|--------------|------|
| 1    | Heater Block            | NCL-01001-02 | 1+1  |
| 2    | Front Insulate Plate    | NCL-01001-03 | 1+1  |
| 3    | Screw                   | TN-00061     | 2+2  |
| 4    | Metal O-Ring            | OR-00018     | 4+4  |
| 5    | Male Connector for Pipe | RA-00493     | 4+4  |
| 6    | Short Pipe              | NCL-01001-06 | 1+1  |
| 7    | Long Pipe               | NCL-01001-05 | 1+1  |
| 8    | Side Insulator Plate    | NCL-03001-04 | 1+1  |
| 9    | Screw                   | TN-00322     | 2+2  |
| 10   | Metal O-Ring            | OR-00054     | 4+4  |
| 11   | "T" Adapter             | RA-00018     | 1+1  |
| 12   | Extension Nipple        | RA-00077     | 2+2  |
| 13   | Fitting                 | RA-00231     | 1+1  |
| 14   | Temperature Probe       | EL-00156-01  | 1+1  |
| 15   | Plug                    | RA-00013     | 4+4  |
| 16   | Pressure Transducer     | HI-00033     | 1+1  |
| 17   | Male Union              | RA-00138     | 1+1  |
| 18   |                         |              |      |
| 19   | Safety Thermostat       | EL-00006     | 1+1  |
| 20   | Grommet                 | EL-00095-00  | 1+1  |
| 21   | Plastic Elbow           | EL-00087-01  | 1+1  |
| 22   | Nut                     | EL-00090-01  | 1+1  |
| 23   | Screw                   | TN-00128     | 2+2  |
| 24   | Heater Resistance       | See Table 34 | 4+4  |
| 25   | Male Union              | RA-00138     | 1+1  |
| 26   | "T" Adapter             | RA-00053     | 1+1  |



***"G-Connect" and "G-Connect+"***  
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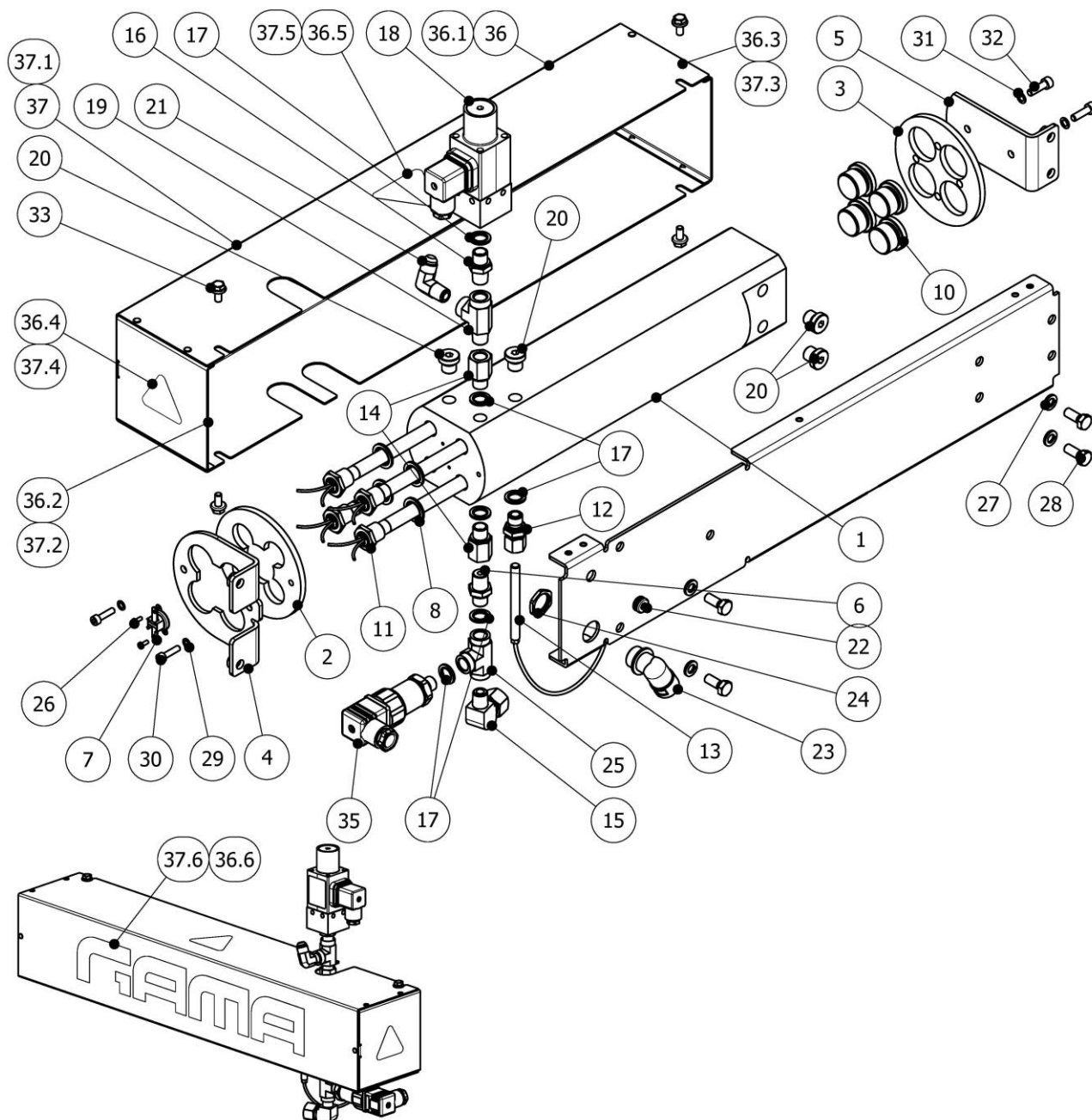
| Item | Description                                               | Part Number  | Qty. |
|------|-----------------------------------------------------------|--------------|------|
| 27   | Pressure Switch                                           | HI-00021     | 1+1  |
| 28   | Heater Protection Assy. (includes from ítem 28.1 to 28.7) | CL-21001-01  | 1    |
| 28.1 | Heater Housing (included in item 28)                      | CL-21001-01A | 1    |
| 28.2 | Heater Front Cover (included in item 28)                  | CL-21001-01C | 1    |
| 28.3 | Heater Rear Cover (included in item 28)                   | CL-21001-01D | 1    |
| 28.4 | Rivet (included in item 28)                               | TN-00240     | 10   |
| 28.5 | Warning Voltage (included in item 28)                     | EM-00016     | 1    |
| 28.6 | Warning Temperature (included in item 28)                 | EM-00018     | 1    |
| 28.7 | G-Connect Tag (included in item 28)                       | EM-00117     | 1    |
| 29   | Heater Protection Assy. (includes from ítem 29.1 to 29.7) | CL-21002-01  | 1    |
| 29.1 | Heater Housing (Included in ítem 29)                      | CL-21002-01A | 1    |
| 29.2 | Heater Front Cover (included in item 29)                  | CL-21001-01C | 1    |
| 29.3 | Heater Rear Cover (included in item 29)                   | CL-21001-01C | 1    |
| 29.4 | Rivet (included in item 29)                               | TN-00240     | 10   |
| 29.5 | Warning Voltage (included in item 29)                     | EM-00016     | 1    |
| 29.6 | Warning Temperature (included in item 29)                 | EM-00018     | 1    |
| 29.7 | G-Connect Tag (included in item 29)                       | EM-00117     | 1    |
|      |                                                           |              |      |
|      |                                                           |              |      |
| 35   | Washer                                                    | TN-00024     | 4+4  |
| 36   | Hex. Cap Screw                                            | TN-00438     | 4+4  |
| 37   | Lock Nut                                                  | TN-00028     | 3+3  |
| 38   | Hex. Cap Screw                                            | TN-00146     | 3+3  |
| 39   | Swivel Elbow 90º                                          | RA-00044     | 1+1  |
| 40   | Swivel Elbow 90º for Pipe                                 | RA-00038     | 1+1  |



***Table 34. References List Heater Resistances "G-Connect+", Ref. List***

| Item | Description                | Part Number | Qty. |
|------|----------------------------|-------------|------|
| 24   | Heat Resistance 400v 2000w | EL-00258    | 4+4  |
|      | Heat Resistance 230v 2000w | EL-00177    | 4+4  |

## ROUND PRIMARY HEATER G-CONNECT



**Figure 14. Round Primary Heater G-Connect**

**Table 35. Round Primary Heater G-Connect, Parts List**

| Item | Description               | Part Number   | Qty. |
|------|---------------------------|---------------|------|
| 1    | Heater Block              | CLH-02001-01A | 1+1  |
| 2    | Front Insulate Plate      | CL-02001-04   | 1+1  |
| 3    | Rear Insulate Plate       | CL-02001-03   | 1+1  |
| 4    | Front Support             | CL-21005-02   | 1+1  |
| 5    | Rear Support              | CL-21005-03   | 1+1  |
| 6    | Nipple                    | RA-00102      | 1+1  |
| 7    | Thermal Limit Switch      | EL-00006      | 1+1  |
| 8    | Metal O-Ring              | OR-00018      | 4+4  |
| 9    |                           |               |      |
| 10   | Plug                      | RA-00012      | 4+4  |
| 11   | Element                   | See Table 36  | 4+4  |
| 12   | Fitting                   | RA-00231      | 1+1  |
| 13   | Temperature probe         | EL-00156-01   | 1+1  |
| 14   | Extension Nipple          | RA-00077      | 2+2  |
| 15   | Elbow 90°                 | RA-00038      | 1+1  |
| 16   | Male Union                | RA-00138      | 1+1  |
| 17   | Metal O-Ring              | OR-00054      | 6+6  |
| 18   | Pressure Switch           | HI-00021      | 1+1  |
| 19   | "T" Adapter               | RA-00018      | 1+1  |
| 20   | Plug                      | RA-00013      | 4+4  |
| 21   | Elbow Union 90°           | RA-00044      | 1+1  |
| 22   | Grommet                   | EL-00095-00   | 1+1  |
| 23   | 90° Elbow for Cable Gland | EL-00087-01   | 1+1  |
| 24   | Nut                       | EL-00090-01   | 1+1  |
| 25   | "T" Adapter               | RA-00053      | 1+1  |



***"G-Connect" and "G-Connect+"***  
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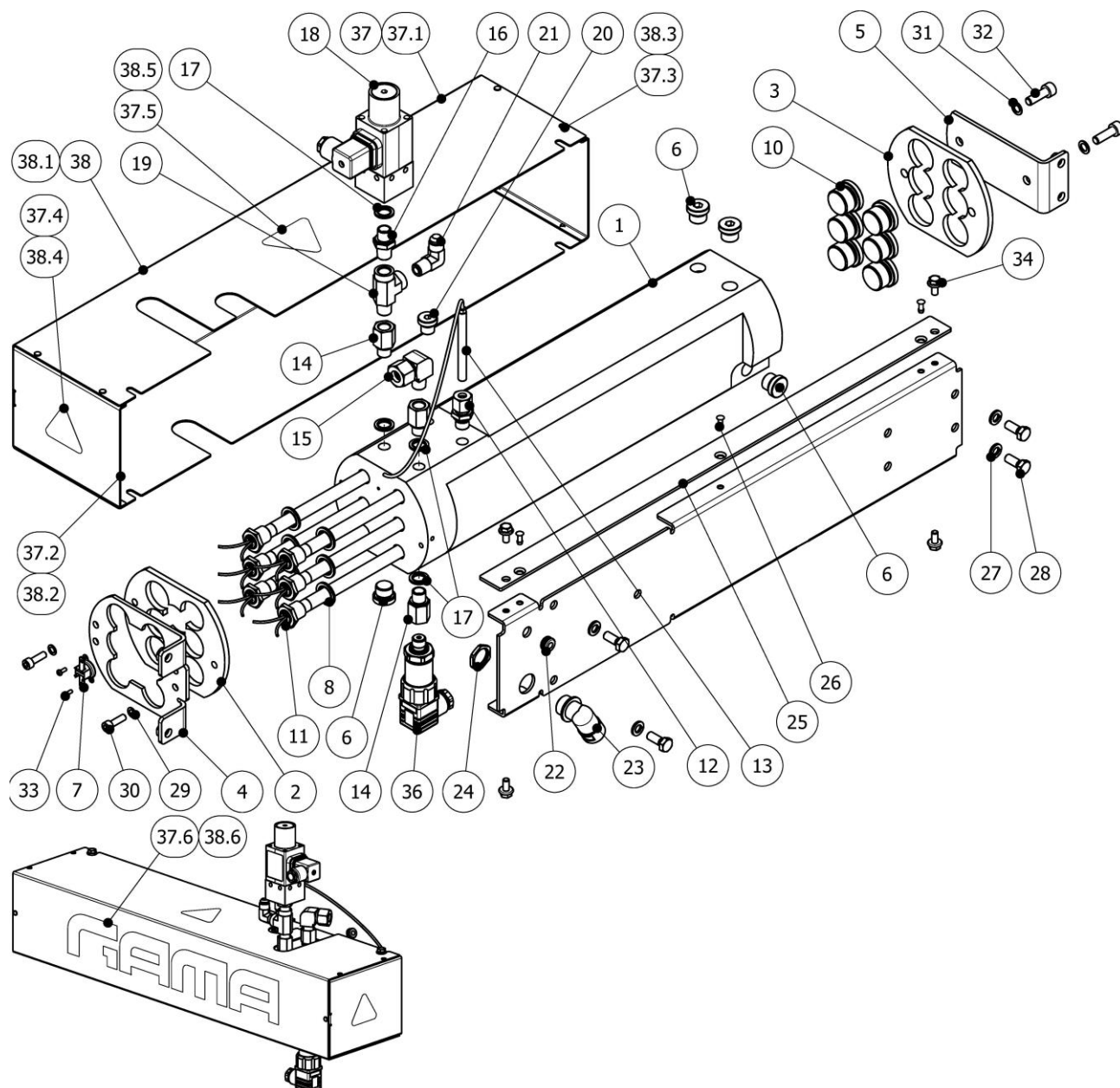
| Item | Description                                                   | Part Number  | Qty. |
|------|---------------------------------------------------------------|--------------|------|
| 26   | Screw                                                         | TN-00128     | 2+2  |
| 27   | Lock Nut                                                      | TN-00028     | 2+2  |
| 28   | Hex. Cap Screw                                                | TN-00187     | 4+4  |
| 29   | Washer                                                        | TN-00017     | 2+2  |
| 30   | Allen Screw                                                   | TN-00234     | 2+2  |
| 31   | Washer                                                        | TN-00048     | 2+2  |
| 32   | Allen Screw                                                   | TN-00026     | 2+2  |
| 33   | Hex. Cap Screw                                                | TN-00491     | 4+4  |
| 34   |                                                               |              |      |
| 35   | Pressure Transducer                                           | HI-00033     | 1+1  |
| 36   | ISO Heater Protection Assy. (includes from Item.36.1 to 36.6) | CL-21009-01  | 1    |
| 36.1 | Heater Housing (included in item 36)                          | CL-21009-01A | 1    |
| 36.2 | Heater Cover (included in item 36)                            | CL-21009-01C | 2    |
| 36.3 | Rivet (included in item 36)                                   | TN-00240     | 10   |
| 36.4 | Warning Voltage (included in item 36)                         | EM-00016     | 1    |
| 36.5 | Warning Temperature (included in item 36)                     | EM-00018     | 1    |
| 36.6 | G-Connect Tag (included in item 36)                           | EM-00117     | 1    |
| 37   | POL Heater Protection Assy. (includes from Item 37.1 to 37.6) | CL-21010-01  | 1    |
| 37.1 | Heater Housing (Included in Item 37)                          | CL-21010-01A | 1    |
| 37.2 | Heater Cover (included in Item 37)                            | CL-21009-01C | 2    |
| 37.3 | Rivet (included in Item 37)                                   | TN-00240     | 10   |
| 37.4 | Warning Voltage (included in Item 37)                         | EM-00016     | 1    |
| 37.5 | Warning Temperature (included in Item 37)                     | EM-00018     | 1    |
| 37.6 | G-Connect Tag (included in Item 37)                           | EM-00117     | 1    |



***Table 36. Heater Resistances "G-Connect", Reference List***

| Item | Description                | Part Number | Qty. |
|------|----------------------------|-------------|------|
| 11   | Heat Resistance 400v 1500w | EL-00189    | 4+4  |
|      | Heat Resistance 230v 1500w | EL-00082    | 4+4  |

**ROUND PRIMARY HEATER G-CONNECT+**



**Figure 15. ISO and POL Round Primary Heater "G-Connect+"**

**Table 37. Round Primary Heater Component List "G-Connect+", Parts List**

| Item | Description       | Part Number   | Qty. |
|------|-------------------|---------------|------|
| 1    | Heater Block      | CLH-01001-01A | 1+1  |
| 2    | Front Insulate    | CL-21003-04   | 1+1  |
| 3    | Rear Insulate     | CL-21003-05   | 1+1  |
| 4    | Front Support     | CL-21003-02   | 1+1  |
| 5    | Rear Support      | CL-21003-03   | 1+1  |
| 6    | Plug              | RA-00049      | 4+4  |
| 7    | Safety Thermostat | EL-00006      | 1+1  |
| 8    | Metal O-Ring      | OR-00018      | 4+4  |
| 9    |                   |               |      |
| 10   | Plug              | RA-00012      | 6+6  |
| 11   | Heater Resistance | See Table 38  | 6+6  |
| 12   | Fitting           | RA-00231      | 1+1  |
| 13   | Temperature Probe | EL-00156-01   | 1+1  |
| 14   | Extension Nipple  | RA-00077      | 3+3  |
| 15   | Elbow 90°         | RA-00038      | 1+1  |
| 16   | Male Union        | RA-00138      | 1+1  |
| 17   | Metal O-Ring      | OR-00054      | 4+4  |
| 18   | Pressure Switch   | HI-00021      | 1+1  |
| 19   | "T" Adapter       | RA-00018      | 1+1  |
| 20   | Plug              | RA-00013      | 1+1  |
| 21   | Elbow 90°         | RA-00044      | 1+1  |
| 22   | Grommet           | EL-00095-00   | 1+1  |
| 23   | Plastic Elbow     | EL-00087-01   | 1+1  |
| 24   | Nut               | EL-00090-01   | 1+1  |
| 25   | Supplement Plate  | MQ-21010      | 1+1  |
| 26   | Rivet             | TN-00372      | 3+3  |



***"G-Connect" and "G-Connect+"***  
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| Item | Description                                               | Part Number  | Qty. |
|------|-----------------------------------------------------------|--------------|------|
| 27   | Washer                                                    | TN-00028     | 4+4  |
| 28   | Hex Cap Screw                                             | TN-00187     | 4+4  |
| 29   | Washer                                                    | TN-00048     | 2+2  |
| 30   | Allen Screw                                               | TN-00026     | 2+2  |
| 31   | Washer                                                    | TN-00038     | 2+2  |
| 32   | Allen Screw                                               | TN-00027     | 2+2  |
| 33   | Screw                                                     | TN-00128     | 2+2  |
| 34   | Hex Cap Screw                                             | TN-00049     | 4+4  |
| 35   |                                                           |              |      |
| 36   | Pressure Transducer                                       | HI-00033     | 1+1  |
| 37   | Heater Protection Assy. (includes from ítem 37.1 to 37.6) | CL-21003-01  | 1    |
| 37.1 | Heater Housing (included in item 37)                      | CL-21003-01A | 1    |
| 37.2 | Heater Cover (included in item 37)                        | CL-21003-01B | 2    |
| 37.3 | Rivet (included in item 37)                               | TN-00240     | 10   |
| 37.4 | Warning Voltage (included in item 37)                     | EM-00016     | 1    |
| 37.5 | Warning Temperature (included in item 37)                 | EM-00018     | 1    |
| 37.6 | G-Connect Tag (included in item 37)                       | EM-00117     | 1    |
| 38   | Heater Protection Assy. (includes from ítem 38.1 to 38.6) | CL-21004-01  | 1    |
| 38.1 | Heater Housing (Included in ítem 38)                      | CL-21004-01A | 1    |
| 38.2 | Heater Cover (included in item 38)                        | CL-21003-01C | 2    |
| 38.3 | Rivet (included in item 38)                               | TN-00240     | 10   |
| 38.4 | Warning Voltage (included in item 38)                     | EM-00016     | 1    |
| 38.5 | Warning Temperature (included in item 38)                 | EM-00018     | 1    |
| 38.6 | G-Connect Tag (included in item 38)                       | EM-00117     | 1    |



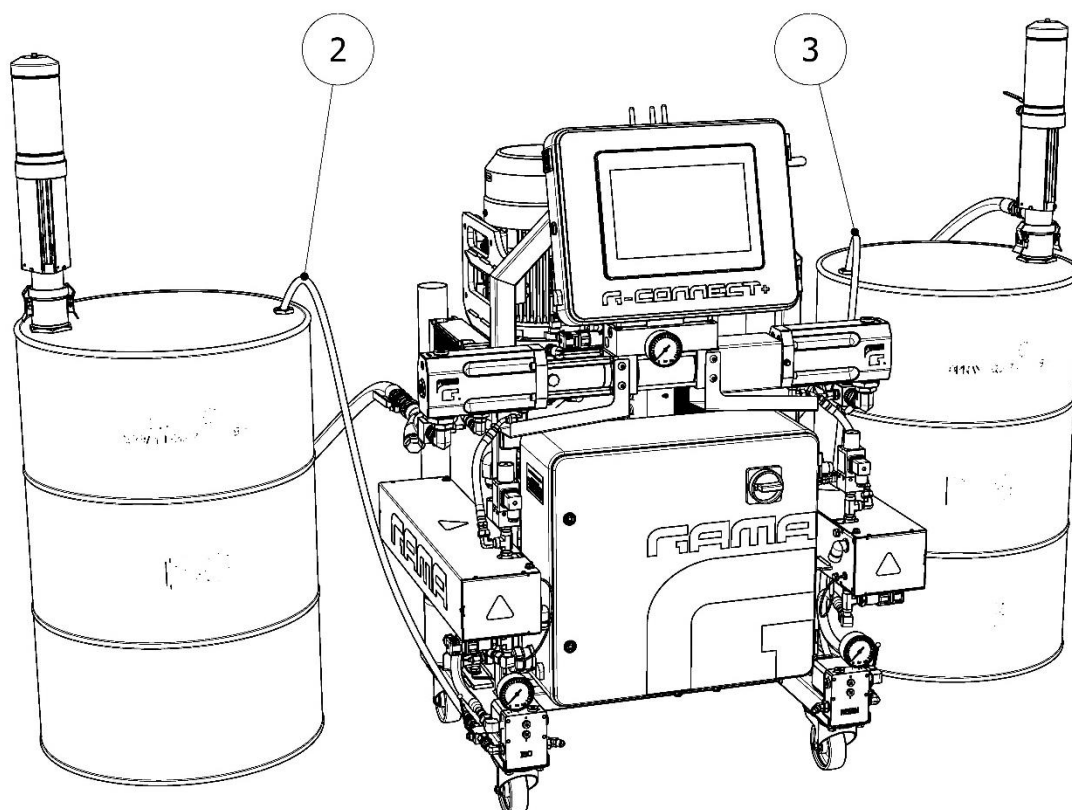
***Table 38. References List Heater Resistances "G-Connect+", Ref. List***

| Item | Description                | Part Number | Qty. |
|------|----------------------------|-------------|------|
| 11   | Heat Resistance 400v 1500w | EL-00179    | 6+6  |
|      | Heat Resistance 230v 1500w | EL-00035    | 6+6  |

## RECIRCULATION KIT DIRECT TO TANKS

### NOTE:

The machine comes with standard fittings and ball valves for recirculation. The rest of the components to complete the set are the parts included in the kit.

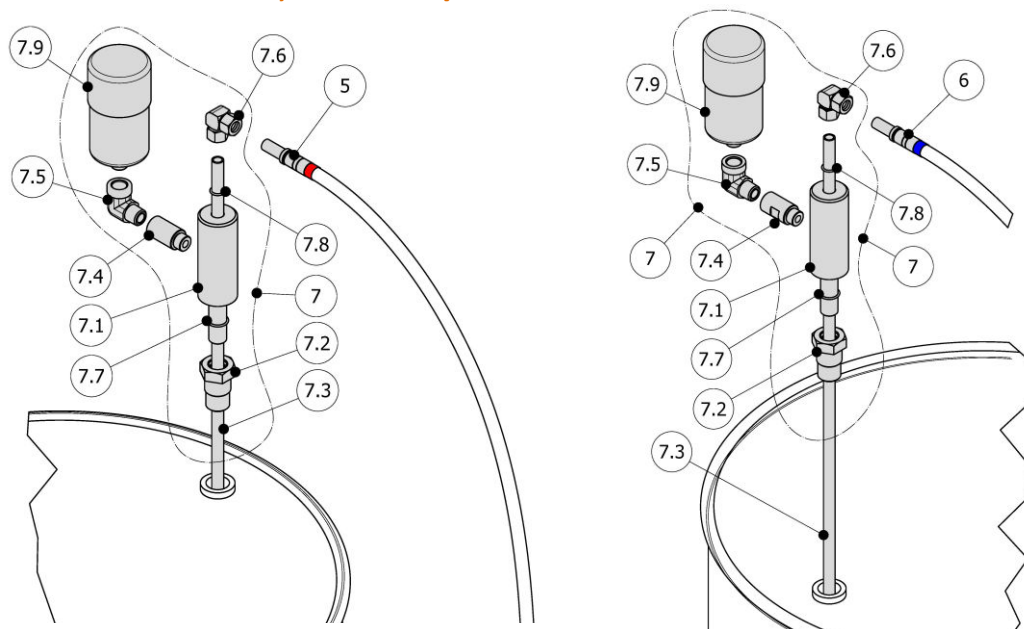


**Figure 16. Recirculation Kit #KT-00199**

**Table 39. Standard Recirculation Kit #KT-00199, Parts List**

| Item | Description       | Part Number | Qty. |
|------|-------------------|-------------|------|
|      | Recirculation Kit | KT-00199    | 1    |
| 2    | Hose "A" ISO      | MA-00050-01 | 1    |
| 3    | Hose "R" POL      | MA-00050-00 | 1    |

## RECIRCULATION KIT, WITH ISO/POL DRIER



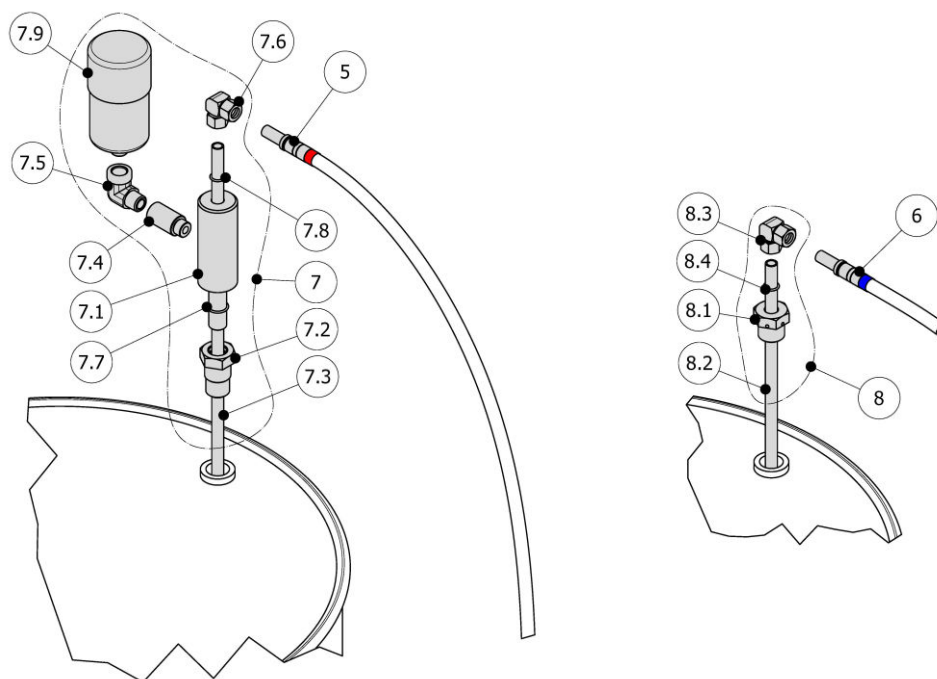
**Figure 17. Recirculation Kit #KT-00199-01**

**Table 40. Recirculation Kit #KT-00199-01, Parts List**

| Item | Description                  | Part Number | Qty.  |
|------|------------------------------|-------------|-------|
|      | Recirculation Kit            | KT-00199-01 | 1     |
| 5    | Hose "A" ISO                 | MA-00050-01 | 1     |
| 6    | Hose "R" POL                 | MA-00050-00 | 1     |
| 7    | Tank Adapter Kit             | MQ-05009-00 | 2     |
| 7.1  | Body Adapter                 | MQ-05010    | 1 (*) |
| 7.2  | Tank Adapter                 | MQ-05009    | 1 (*) |
| 7.3  | Pipe                         | HI-00075    | 1 (*) |
| 7.4  | Length Union                 | RA-00256    | 1 (*) |
| 7.5  | Elbow Union                  | RA-00257    | 1 (*) |
| 7.6  | Elbow Union for Pipe         | RA-00200    | 1 (*) |
| 7.7  | O-Ring                       | OR-00055    | 2(*)  |
| 7.8  | O-Ring                       | OR-00011    | 1 (*) |
| 7.9  | Dehumidifier filter (drying) | NE-00045    | 1 (*) |

**Note: (\*) Unit quantities included in one item 7 set.**

## RECIRCULATION KIT, WITH DRYING ISO TANK



**Figure 18. Recirculation Kit #KT-00199-03**

**Table 41. Recirculation Kit #KT-00199-03, Parts List**

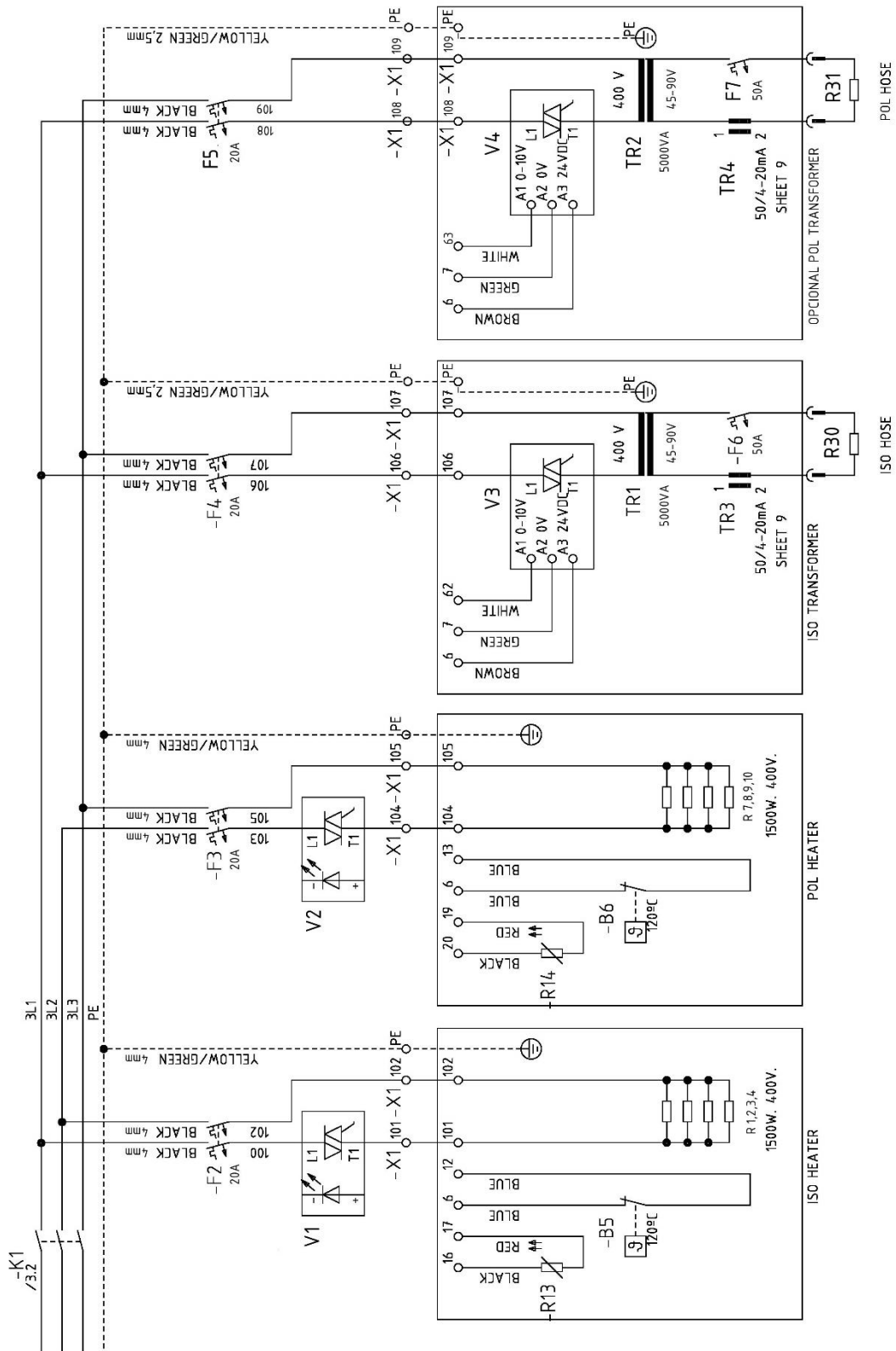
| Item | Description       | Part Number | Qty. |
|------|-------------------|-------------|------|
|      | Recirculation Kit | KT-00199-03 | 1    |
| 5    | Hose "A" Iso      | MA-00050-01 | 1    |
| 6    | Hose "R" Resin    | MA-00050-00 | 1    |
| 7    | Tank Adapter Kit  | MQ-05009-00 | 1    |
| 7.1  | Body Adapter      | MQ-05010    | 1    |
| 7.2  | Tank Adapter      | MQ-05009    | 1    |
| 7.3  | Pipe              | HI-00075    | 1    |
| 7.4  | Length Union      | RA-00256    | 1    |
| 7.5  | Elbow Union       | RA-00257    | 1    |



| Item | Description                   | Part Number | Qty. |
|------|-------------------------------|-------------|------|
| 7.6  | Elbow Union for Tube          | RA-00200    | 1    |
| 7.7  | O-Ring                        | OR-00055    | 2    |
| 7.8  | O-Ring                        | OR-00011    | 1    |
| 7.9  | Dehumidifier Filter (Drying)  | NE-00045    | 1    |
| 8    | Filter less Tank Adapter Assy | MQ-05010-00 | 1    |
| 8.1  | Tank Adapter                  | MQ-05009-A  | 1    |
| 8.2  | Pipe                          | HI-00075    | 1    |
| 8.3  | Elbow Union for Pipe          | RA-00200    | 1    |
| 8.4  | O-Ring                        | OR-00011    | 1    |

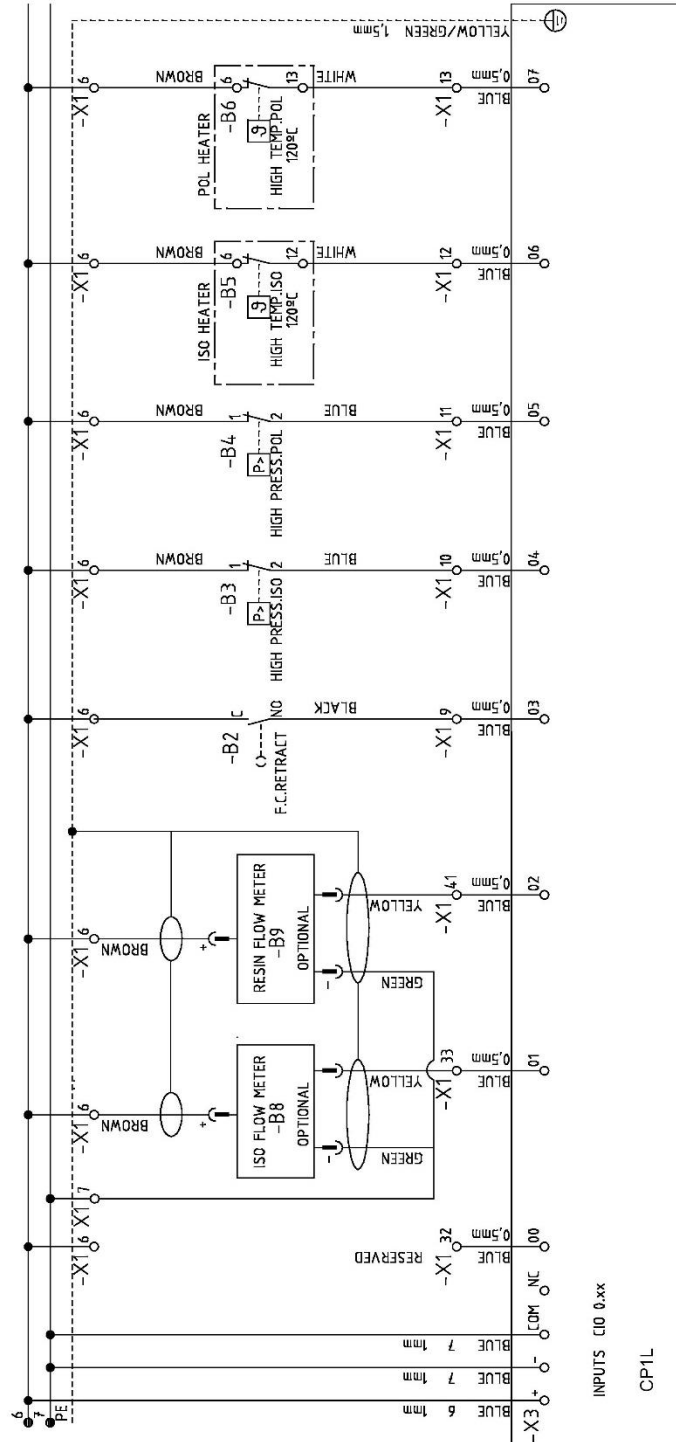
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<http://www.gamapur.com/>



**Figure 20. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" (Sheet 2/9)**

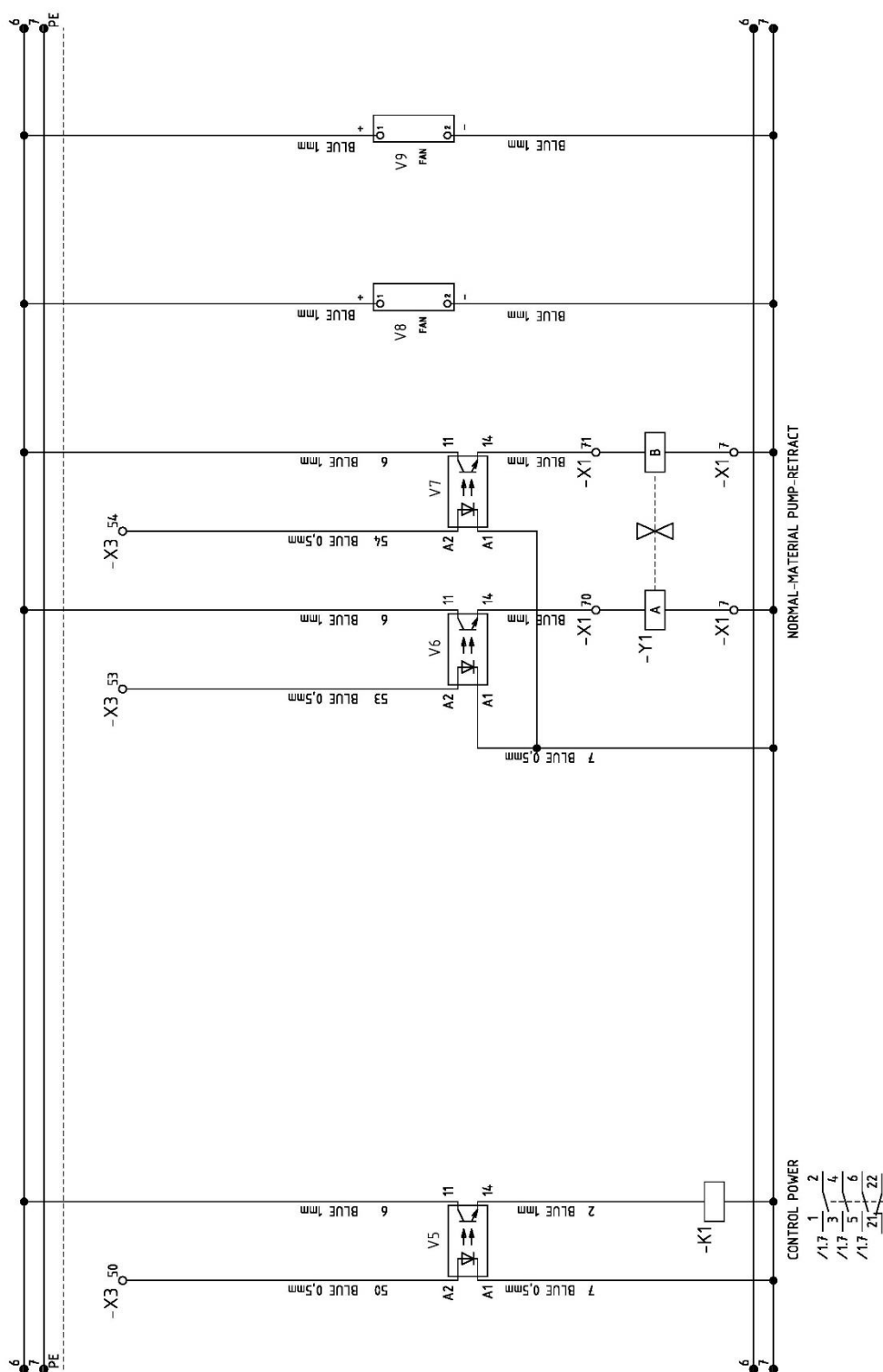




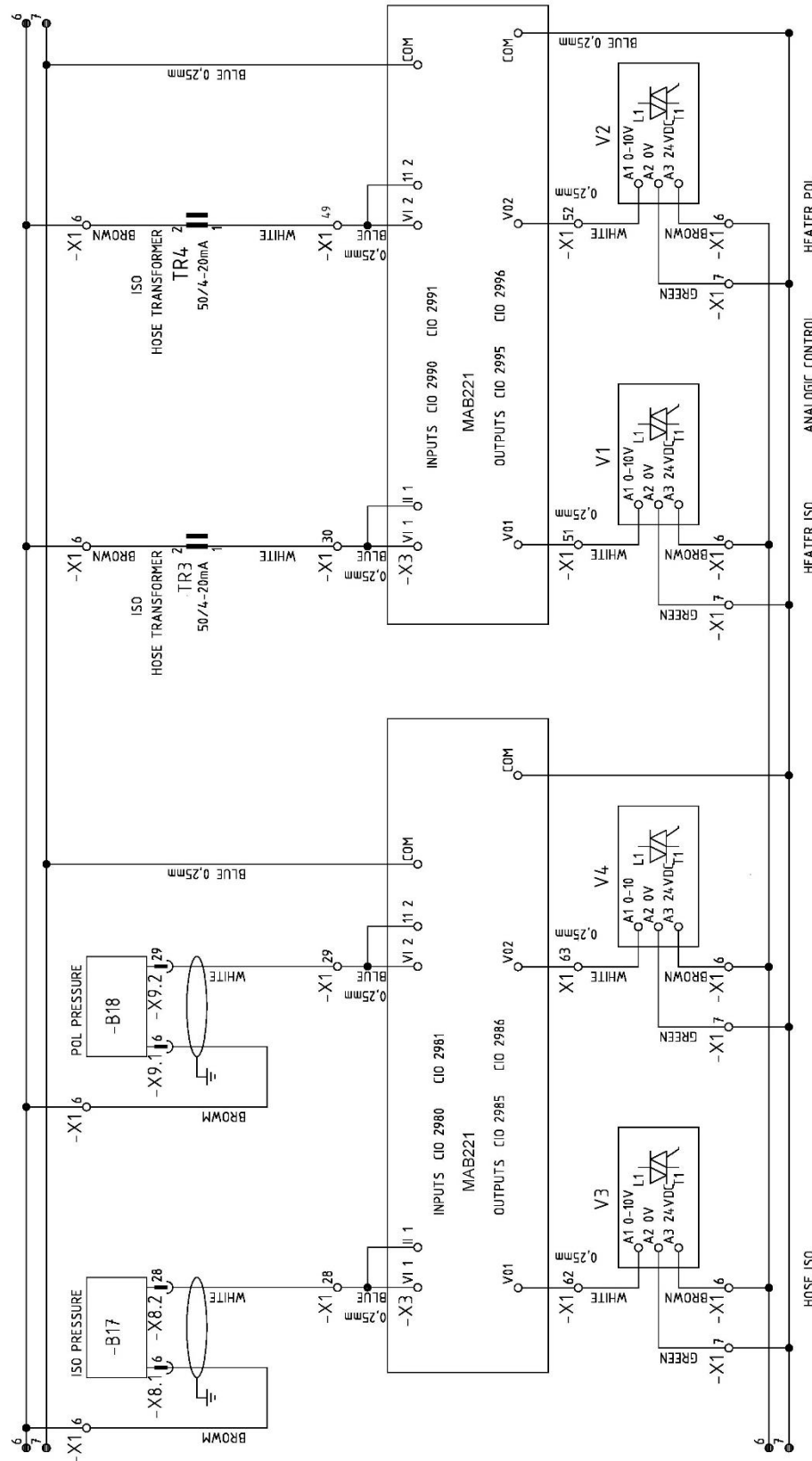
**Figure 22. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" (Sheet 4/9)**







**Figure 25. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" (Sheet 7/9)**



**Figure 26. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" (Sheet 8/9)**

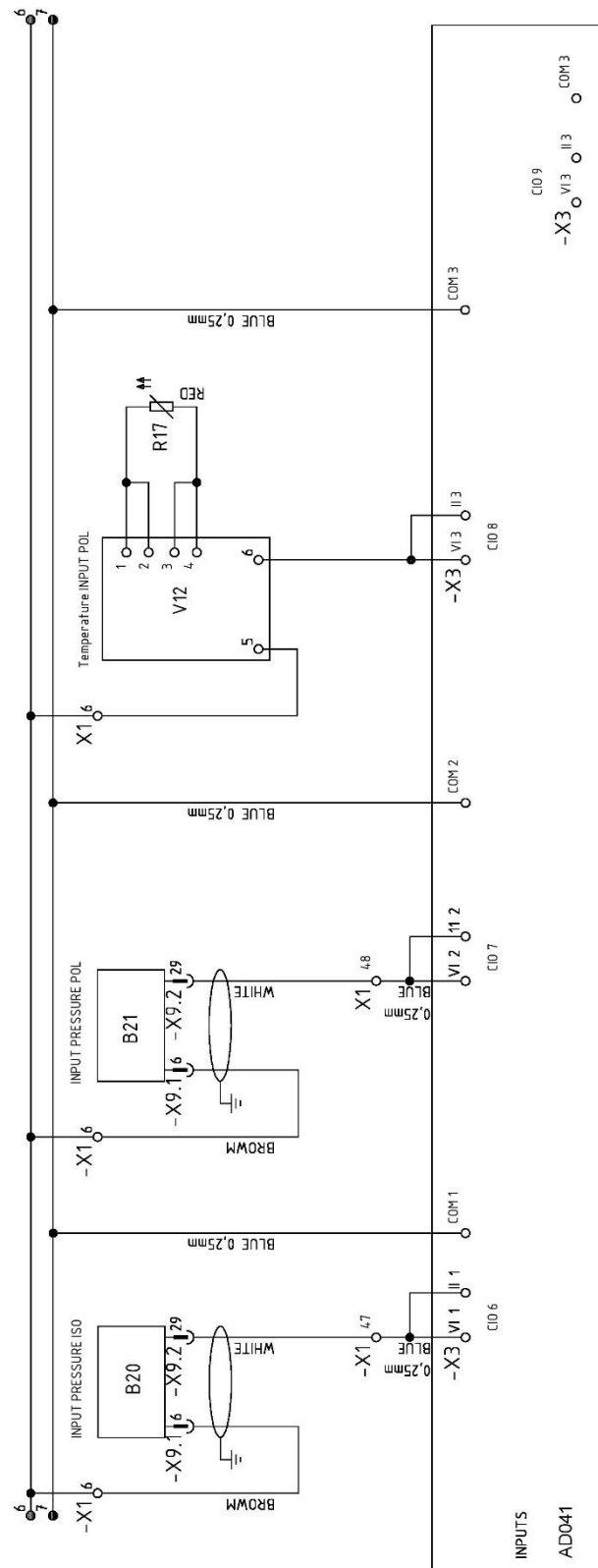
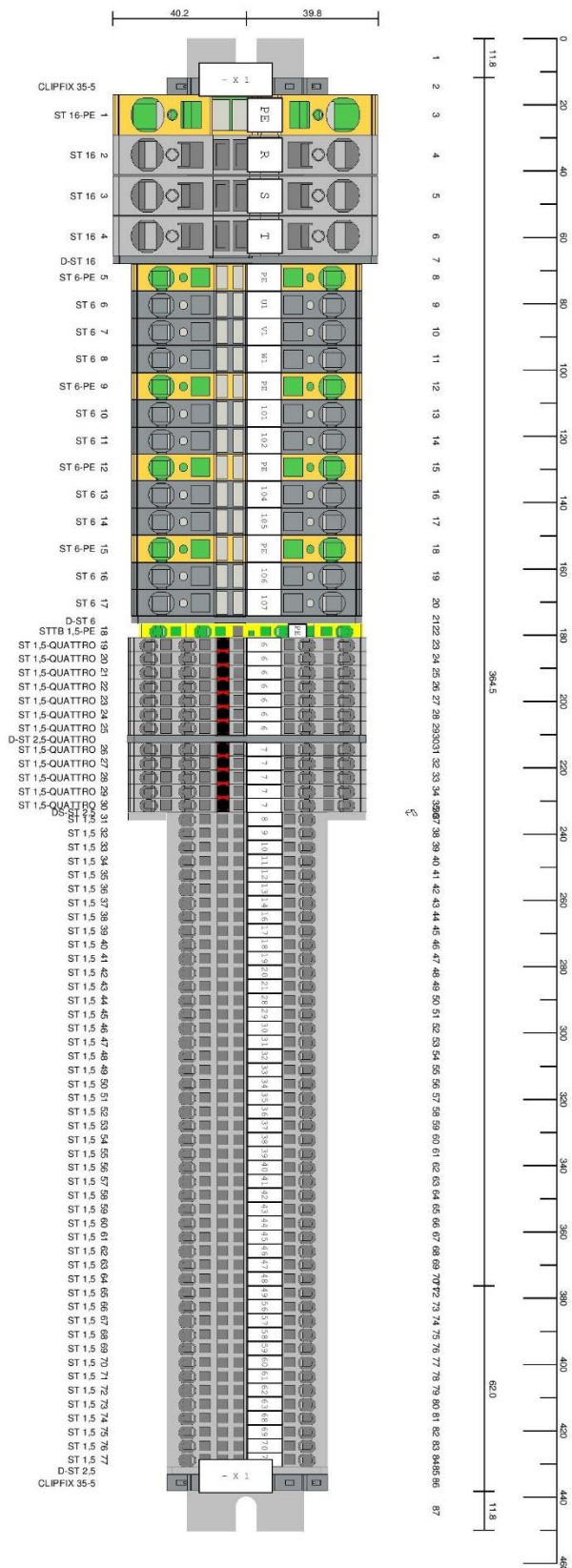


Figure 27. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" (Sheet 9/9)

**"G-Connect" and "G-Connect+"  
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**Figure 28. Distribution 3PE~400V 50/60Hz, "G-Connect"**



**"G-Connect" and "G-Connect+"**  
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**Parts Manual**

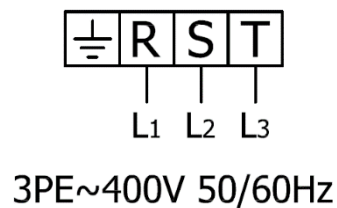
**Table 42. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect" Parts List**

| Item.               | Description                               | Part Number                | Qty. |
|---------------------|-------------------------------------------|----------------------------|------|
| B1,2                | Micro Switch                              | EL-00020                   | 2    |
| B3,4                | Pressure Switch                           | HI-00021                   | 2    |
| B5,6                | Safety thermostat                         | EL-00006                   | 2    |
| B7                  | Gun Microswitch (Optional)                |                            | 1    |
| B8,9                | Flow Meter                                | EL-00079-01                | 2    |
| B17,18,19,20,<br>21 | Pressure Transducer                       | HI-00033                   | 5    |
| C1                  | Ethernet Switch Module                    | EL-00171-07<br>EL-00292-04 | 1    |
| C2                  | Router 4G/WIFI/GPS                        | EL-00332                   | 1    |
| C3                  | HMI                                       | EL-00331                   | 1    |
| D1                  | Differential Switch 4 poles 63A 0.03A     | EL-00108-04                | 1    |
| F1                  | Circuit Breaker 2 poles 3A curve C        | EL-00109-04                | 1    |
| F2,3                | Circuit Breaker 2 poles 20A curve C       | EL-00113-04                | 2    |
| F4,5                | Circuit Breaker 2 poles 20A curve C       | EL-00113-04                | 1    |
| F6,7                | Circuit Breaker 1 pole 50A curve C        | EL-00117-01                | 1    |
| F8                  | Adjustable Circuit Breaker 6,3-10A        | EL-00119-04                | 1    |
|                     | Auxiliary contact for circuit breaker     | EL-00119-03                | 1    |
| F10                 | Crystal Fuse 6.3A                         | EL-00128-03                | 1    |
| G1                  | Power Supply 180-550Vac-24Vdc 5A.         | EL-00135-03                | 1    |
| I1                  | Main Switch 3 poles 63A                   | EL-00107-07                | 1    |
| K1                  | Contactor 22kW 24Vdc                      | EL-00121-02                | 1    |
| K2                  | Contactor 7.5kW 24Vdc                     | EL-00123-02                | 1    |
| M1                  | Motor 4 kW 1450rpm 50/60Hz 230/400V       | EL-00138-04                | 1    |
| R1,2,3,4            | Element Ø12.7 L455 1500W400V Sq. Heater   | EL-00179                   | 4    |
|                     | Element Ø12.7 L375 1500W400V Round Heater | EL-00189 *                 |      |
| R7,8,9,10           | Element Ø12.7 L455 1500W400V Sq. Heater   | EL-00179                   | 4    |
|                     | Element Ø12.7 L375 1500W400V Round Heater | EL-00189 *                 |      |
| R13,14,15,16,<br>17 | PT100 Encapsulated Probe                  | EL-00156-01                | 5    |

**(\*) Optionally for Round Block Heater**



| Item.    | Description                                      | Part Number | Qty. |
|----------|--------------------------------------------------|-------------|------|
| R19      | Resistance 3.3KΩ 6W                              | EL-00129-01 | 1    |
| R30      | Hose ISO + POL                                   |             | 1    |
| TR1,2    | Base Transformer 400/45-90V 50A 5000VA           | EL-00012-02 | 1    |
| TR3,4    | Intensity Transformer 50A 4/20mA                 | EL-00127-19 | 1    |
| V1, 2    | Relay Control 100A 480V 0-10V.                   | EL-00126-13 | 2    |
| V3       | Relay Control 100A 230V 0-10V.                   | EL-00126-11 | 1    |
| V5, 6, 7 | Solid State Relay 6A 24Vdc                       | EL-00126-06 | 3    |
| V8       | Fan 24Vdc 2W 80x80mm                             | EL-00133-02 | 1    |
| V9       | Fan 24Vdc 2W 40x40mm                             | EL-00133-03 | 1    |
| V11      | Transmitter MINI                                 | EL-00164-02 | 1    |
| V12      | Module PT100 a 4-20mA                            | EL-00292-03 | 1    |
| X1       | Distributor                                      | EL-00105-13 | 1    |
| X3       | CPU                                              | EL-00171-03 | 1    |
| Y1/A     | Solenoid valve coil NORMAL                       | HI-00054-01 | 1    |
| Y1/B     | Solenoid valve coil RETRECT                      | HI-00054-01 | 1    |
|          | Auxiliary Contact for Adjustable Circuit Breaker | EL-00119-03 | 1    |

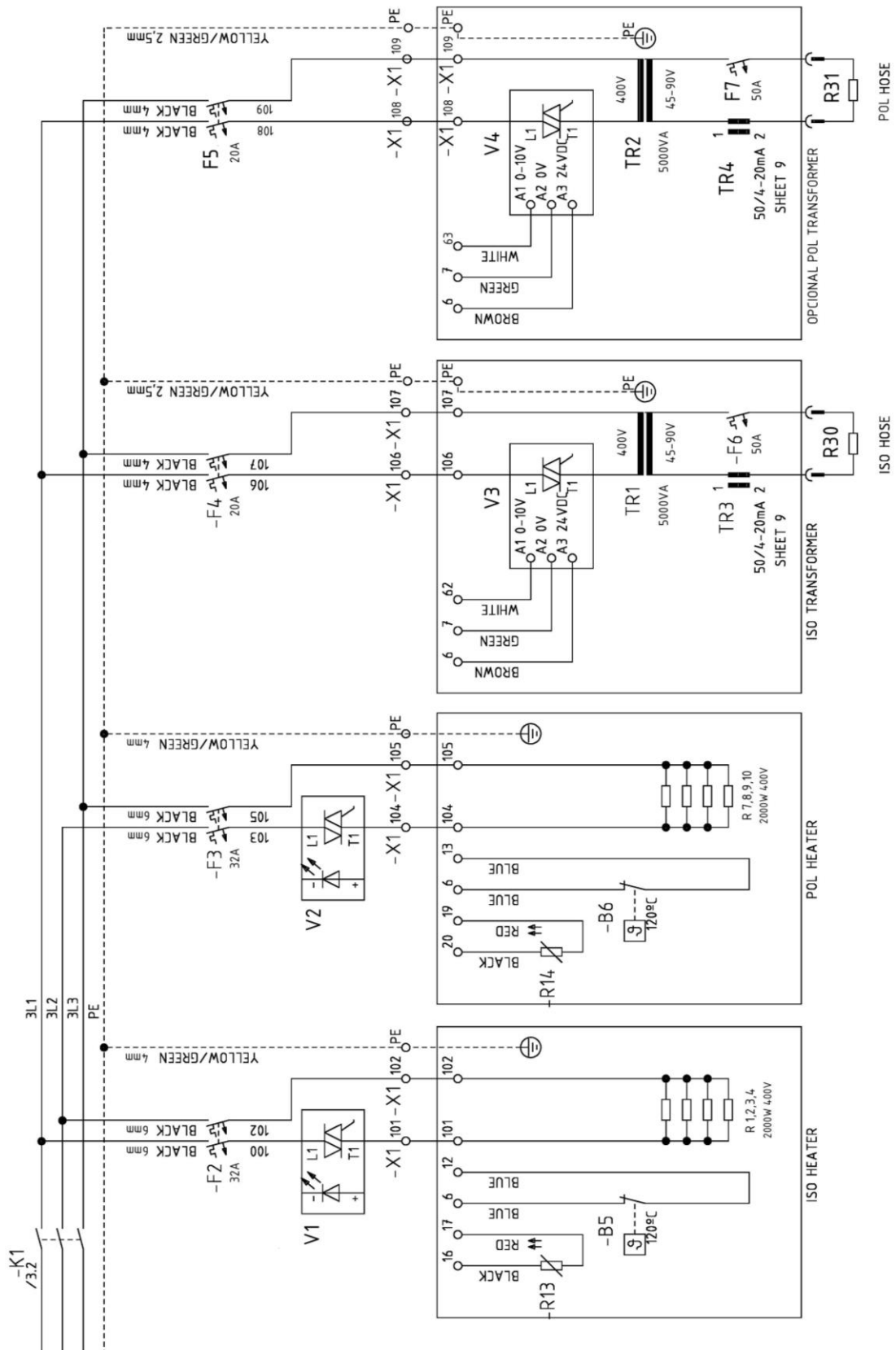


**Figure 29. Connection 3PE~400V 50/60Hz, "G-Connect"**

The diagram illustrates a 24VDC power supply system for a motor control. The system components and their connections are as follows:

- Input:** 230VAC (X1) with lines labeled 1L1, 2L2, and 2L3.
- Transformer (T1):** A 200/500V transformer with a 24V secondary winding. The primary is connected to the 230VAC input. The secondary is connected to a bridge rectifier (D1) and a 3A fuse (F1).
- Rectifier (D1):** A bridge rectifier with a 3.3K resistor (R19) connected to the negative output.
- Output:** The 24VDC output (X16) is connected to the motor (M1) and the alarm (C1). The output is also connected to a 24VDC output (X17) and a 24VDC output (X18).
- Motor (M1):** A 3-phase motor with a 5.5kW/72.3A rating and 1450 RPM. It is connected to the 24VDC output (X16).
- Alarm (C1):** A 24VDC alarm unit connected to the 24VDC output (X16).
- Other Components:** A 24VDC output (X17) and a 24VDC output (X18) are also shown. A 24VDC output (X19) is connected to the 24VDC output (X16).

<http://www.gamapur.com/>



**Figure 31. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 2/9)**

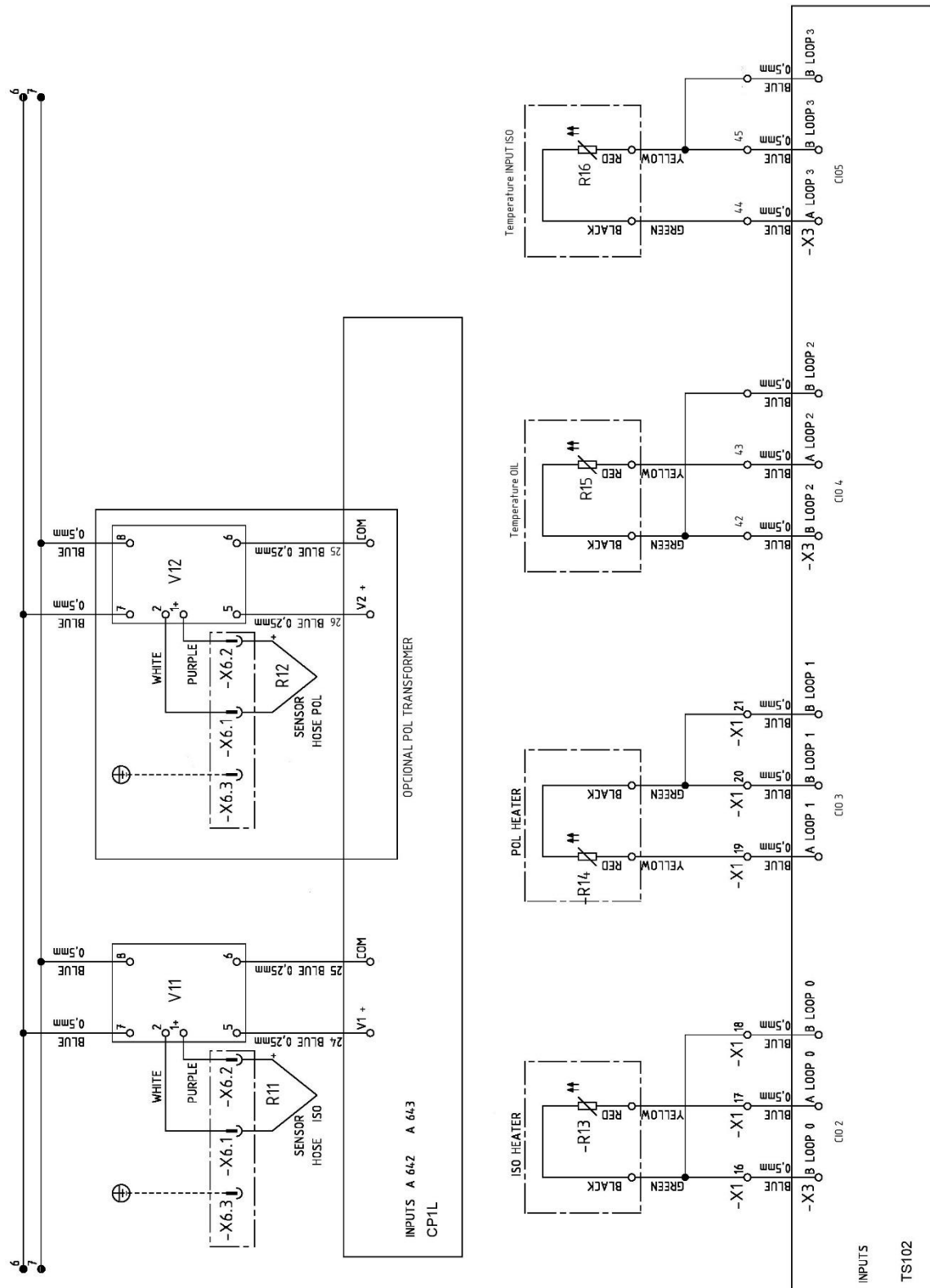
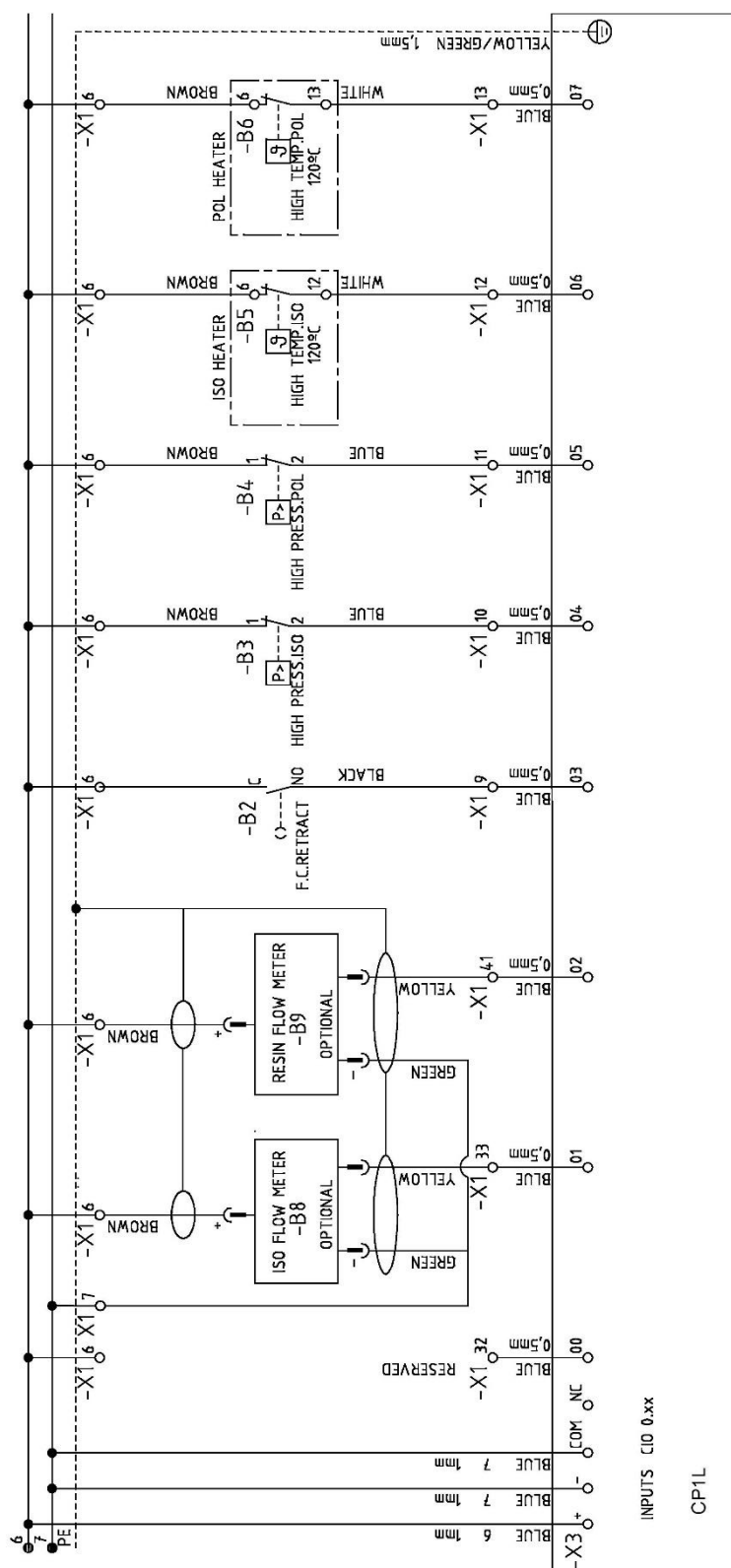


Figure 32. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 3/9)



**Figure 33. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 4/9)**

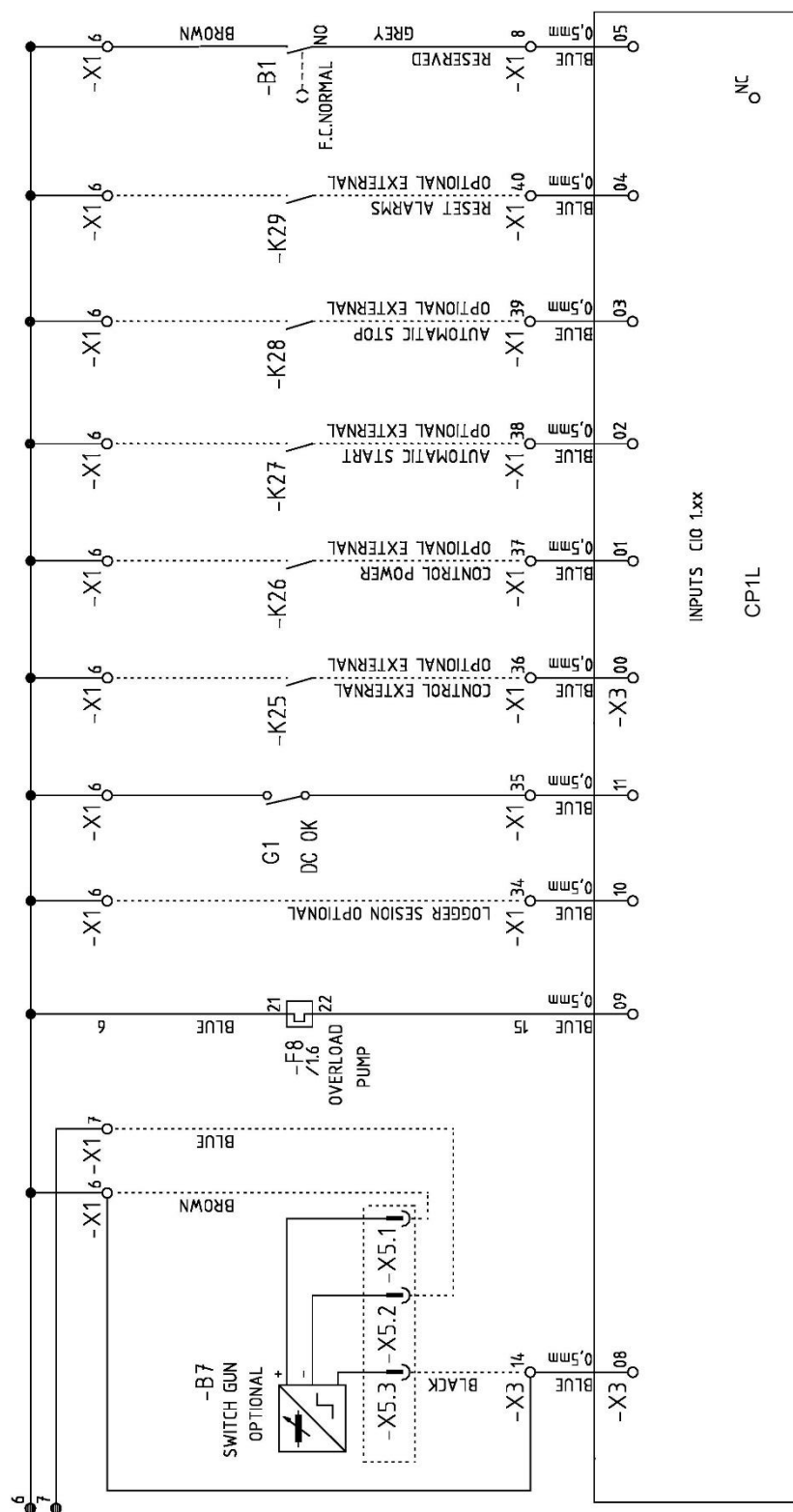
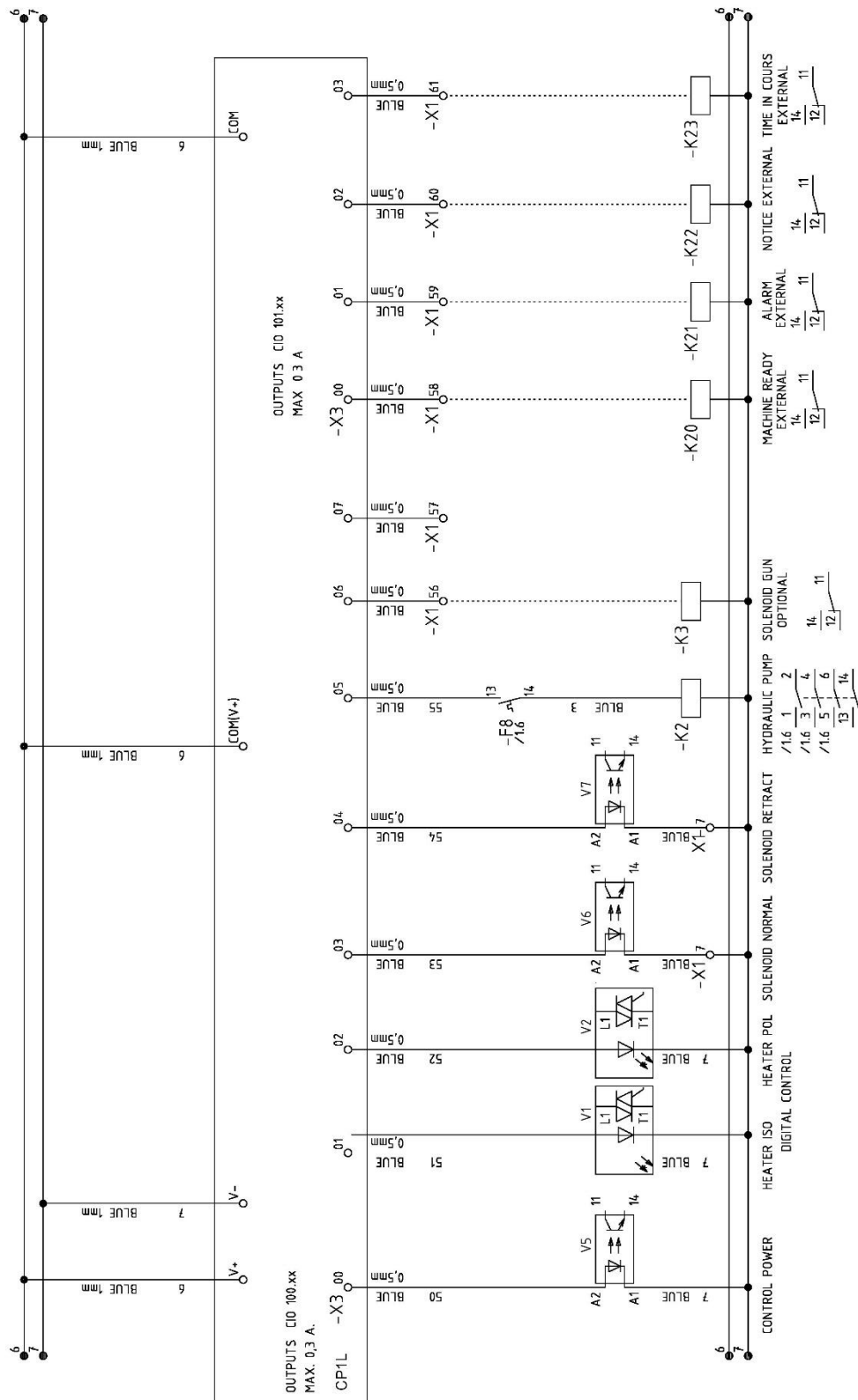


Figure 34. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 5/9)



**Figure 35. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 6/9)**

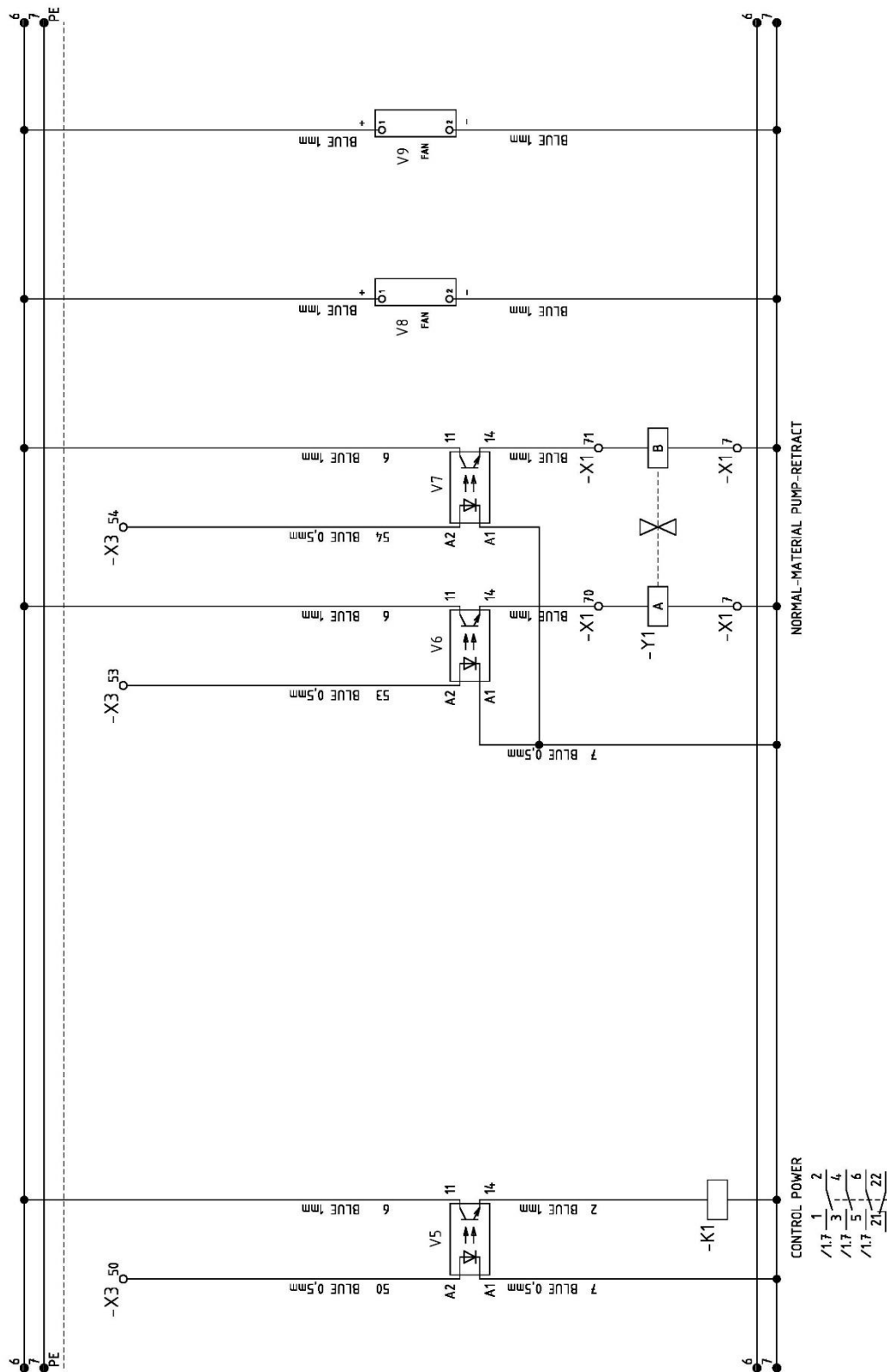
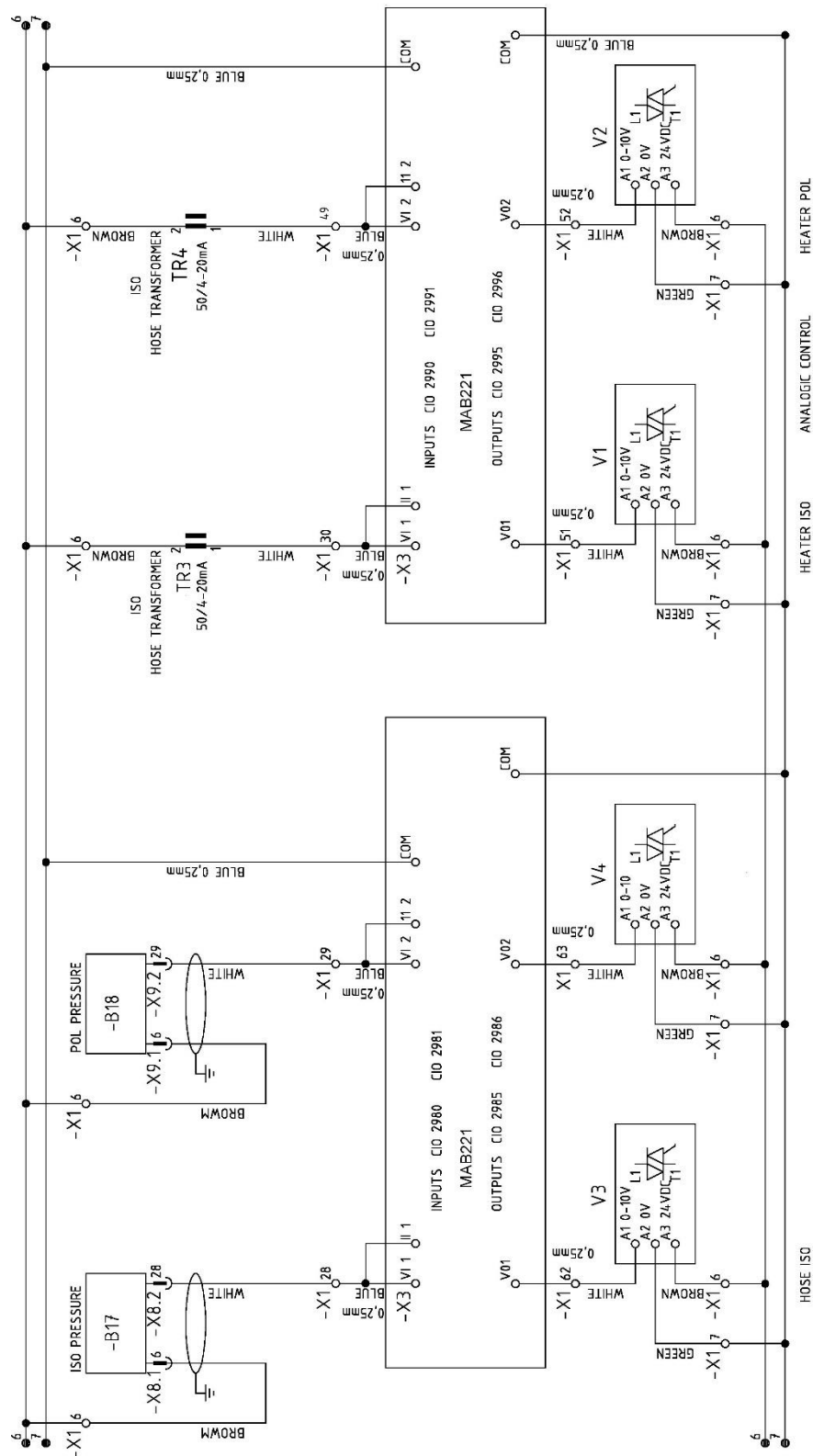


Figure 36. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 7/9)



**Figure 37. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 8/9)**

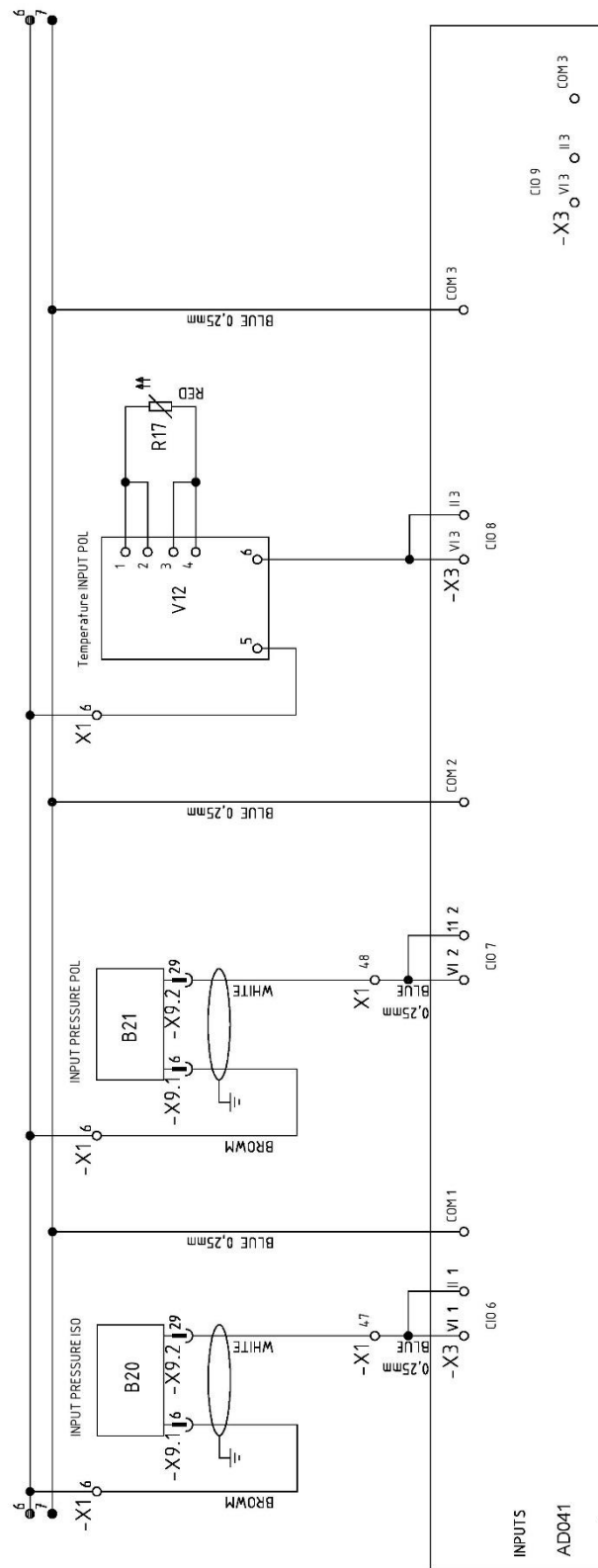
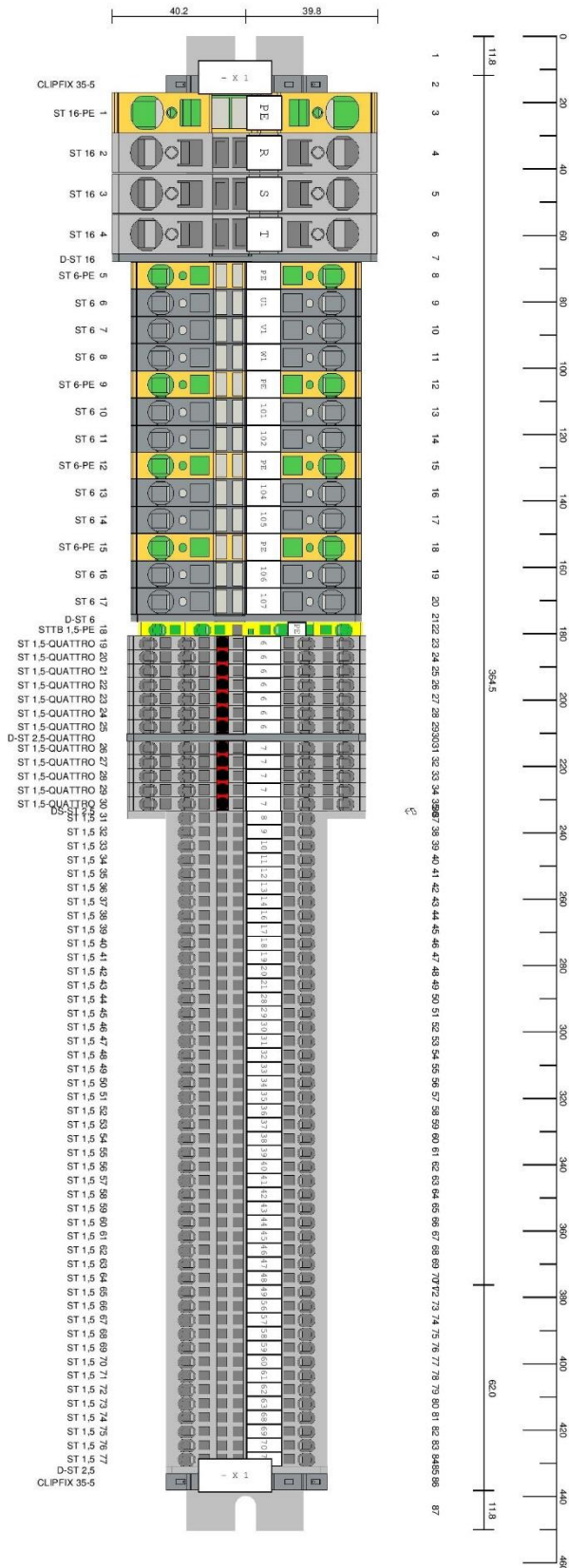


Figure 38. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" (Sheet 9/9)

# ***"G-Connect" and "G-Connect+" Proportioning Unit***

## **Parts Manual**



**Figure 39. Distribution 3PE~400V 50/60Hz, "G-Connect+"**



**"G-Connect" and "G-Connect+"**  
**Proportioning Unit**  
**Parts Manual**

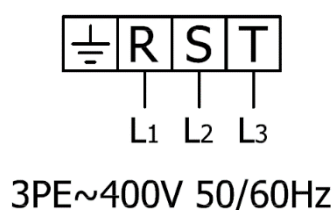
**Table 43. Elec. Schem. 3PE~400V 50/60Hz, "G-Connect+" Parts List**

| Item.               | Description                               | Part Number                | Qty. |
|---------------------|-------------------------------------------|----------------------------|------|
| B1,2                | Micro Switch                              | EL-00020                   | 2    |
| B3,4                | Pressure Switch                           | HI-00021                   | 2    |
| B5,6                | Safety thermostat                         | EL-00006                   | 2    |
| B7                  | Gun Microswitch (Optional)                |                            | 1    |
| B8,9                | Flow Meter                                | EL-00079-01                | 2    |
| B17,18,<br>19,20,21 | Pressure Transducer                       | HI-00033                   | 5    |
| C1                  | Ethernet Switch Module                    | EL-00171-07<br>EL-00292-04 | 1    |
| C3                  | HMI                                       | EL-00331                   | 1    |
| D1                  | Differential Switch 4 poles 63A 0.03A     | EL-00108-04                | 1    |
| F1                  | Circuit Breaker 2 poles 3A curve C        | EL-00109-04                | 1    |
| F2,3                | Circuit Breaker 2 poles 32A curve C       | EL-00115-03                | 2    |
| F4,5                | Circuit Breaker 2 poles 20A curve C       | EL-00113-04                | 1    |
| F6,7                | Circuit Breaker 1 pole 50A curve C        | EL-00117-01                | 1    |
| F8                  | Adjustable Circuit Breaker 9-14A          | EL-00119-05                | 1    |
|                     | Auxiliary contact for circuit breaker     | EL-00119-03                | 1    |
| F10                 | Crystal Fuse 6.3A                         | EL-00128-03                | 1    |
| G1                  | Power Supply 180-550Vac-24Vdc 5A.         | EL-00135-03                | 1    |
| I1                  | MAin Switch 3 poles 63A                   | EL-00107-07                | 1    |
| K1                  | Contactor 22kW 24Vdc                      | EL-00121-02                | 1    |
| K2                  | Contactor 7.5kW 24Vdc                     | EL-00123-02                | 1    |
| M1                  | Motor 5,5 kW 1450rpm 50/60Hz 230/400V     | EL-00138-01                | 1    |
| R1,2,3,4            | Element Ø12.7 L455 2000W400V Sq. Heater   | EL-00258                   | 4    |
| R1,2,3,4,5,6        | Element Ø12.7 L455 1500W400V Round Heater | EL-00179 *                 | 6    |
| R7,8,9,10           | Element Ø12.7 L455 2000W400V Sq. Heater   | EL-00258                   | 4    |
| R7,8,9,10,11,<br>12 | Element Ø12.7 L455 1500W400V Round Heater | EL-00179 *                 | 6    |
| R13,14,<br>15,16,17 | PT100 Encapsulated Probe                  | EL-00156-01                | 5    |

**(\*) Optionally for Round Block Heater**



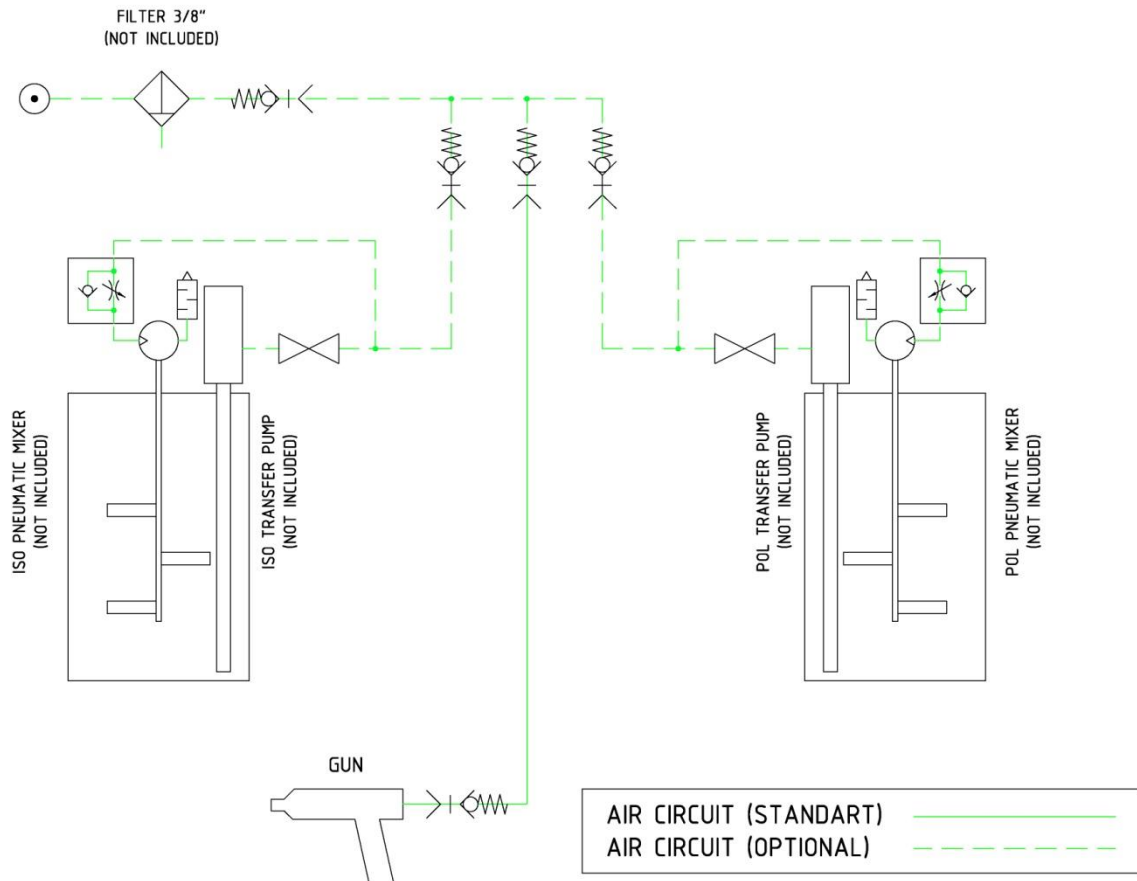
| Item.    | Description                                      | Part Number | Qty. |
|----------|--------------------------------------------------|-------------|------|
| R19      | Resistance 3.3KΩ 6W                              | EL-00129-01 | 1    |
| R30      | Hose ISO + POL                                   |             | 1    |
| TR1      | Base Transformer 400/45-90V 50A 5000VA           | EL-00012-02 | 1    |
| TR3      | Intensity Transformer 50A 4/20mA                 | EL-00127-19 | 1    |
| V1, 2    | Relay Control 100A 480V 0-10V.                   | EL-00126-13 | 2    |
| V3       | Relay Control 100A 230V 0-10V.                   | EL-00126-11 | 1    |
| V5, 6, 7 | Solid State Relay 6A 24Vdc                       | EL-00126-06 | 3    |
| V8       | Fan 24Vdc 2W 80x80mm                             | EL-00133-02 | 1    |
| V9       | Fan 24Vdc 2W 40x40mm                             | EL-00133-03 | 1    |
| V11      | Transmitter MINI                                 | EL-00164-02 | 1    |
| V12      | Module PT100 a 4-20mA                            | EL-00292-03 | 1    |
| X1       | Distributor                                      | EL-00105-13 | 1    |
| X3       | CPU                                              | EL-00171-03 | 1    |
| Y1/A     | Solenoid valve coil NORMAL                       | HI-00054-01 | 1    |
| Y1/B     | Solenoid valve coil RETRECT                      | HI-00054-01 | 1    |
|          | Auxiliary Contact for Adjustable Circuit Breaker | EL-00119-03 | 1    |



**Figure 40. Connection 3PE~400V 50/60Hz, "G-Connect+"**



## PNEUMATIC SCHEMATIC DIAGRAM

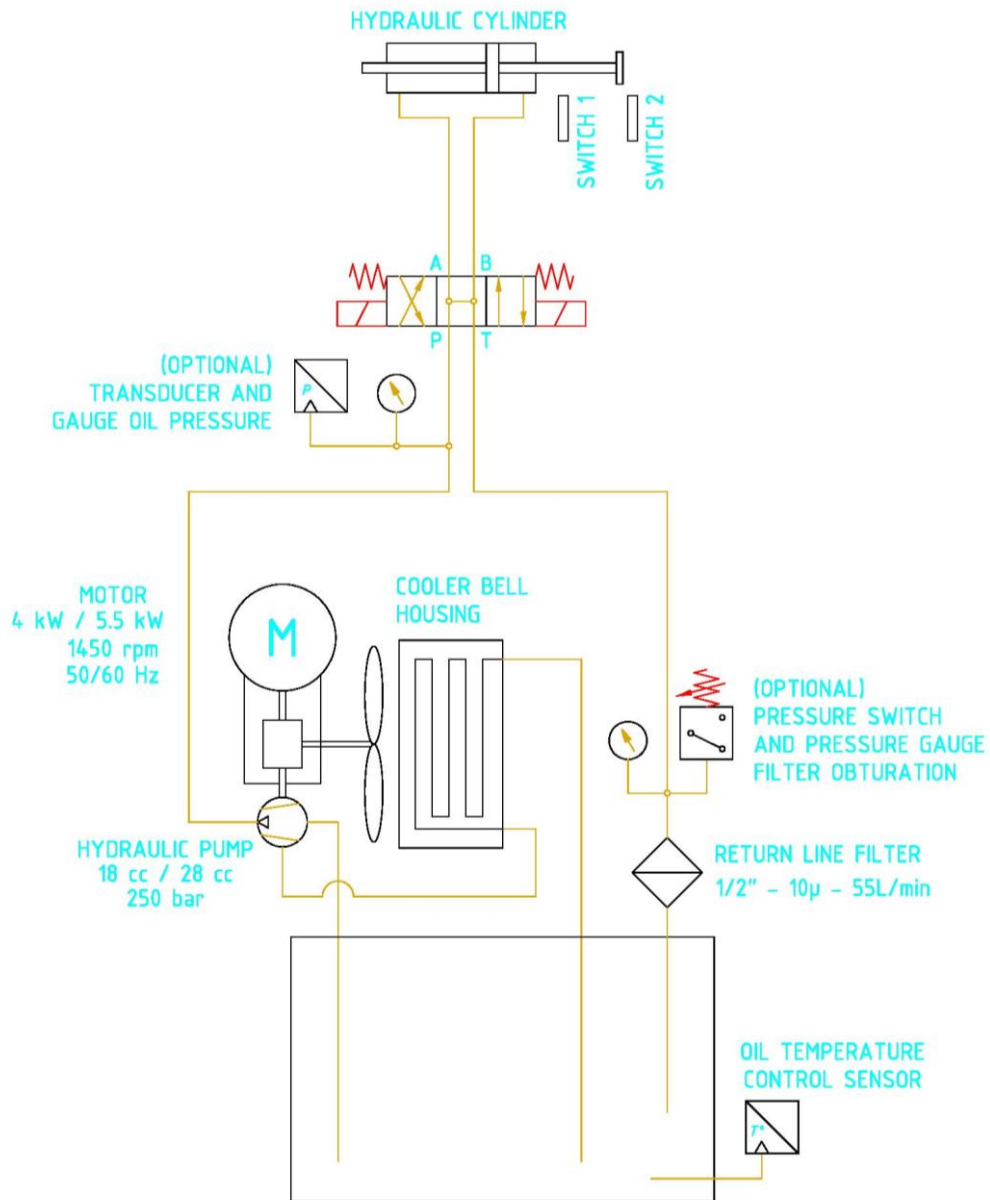


**Common for G-Connect and G-Connect+**

**Figure 41. Pneumatic Schematic Diagram**



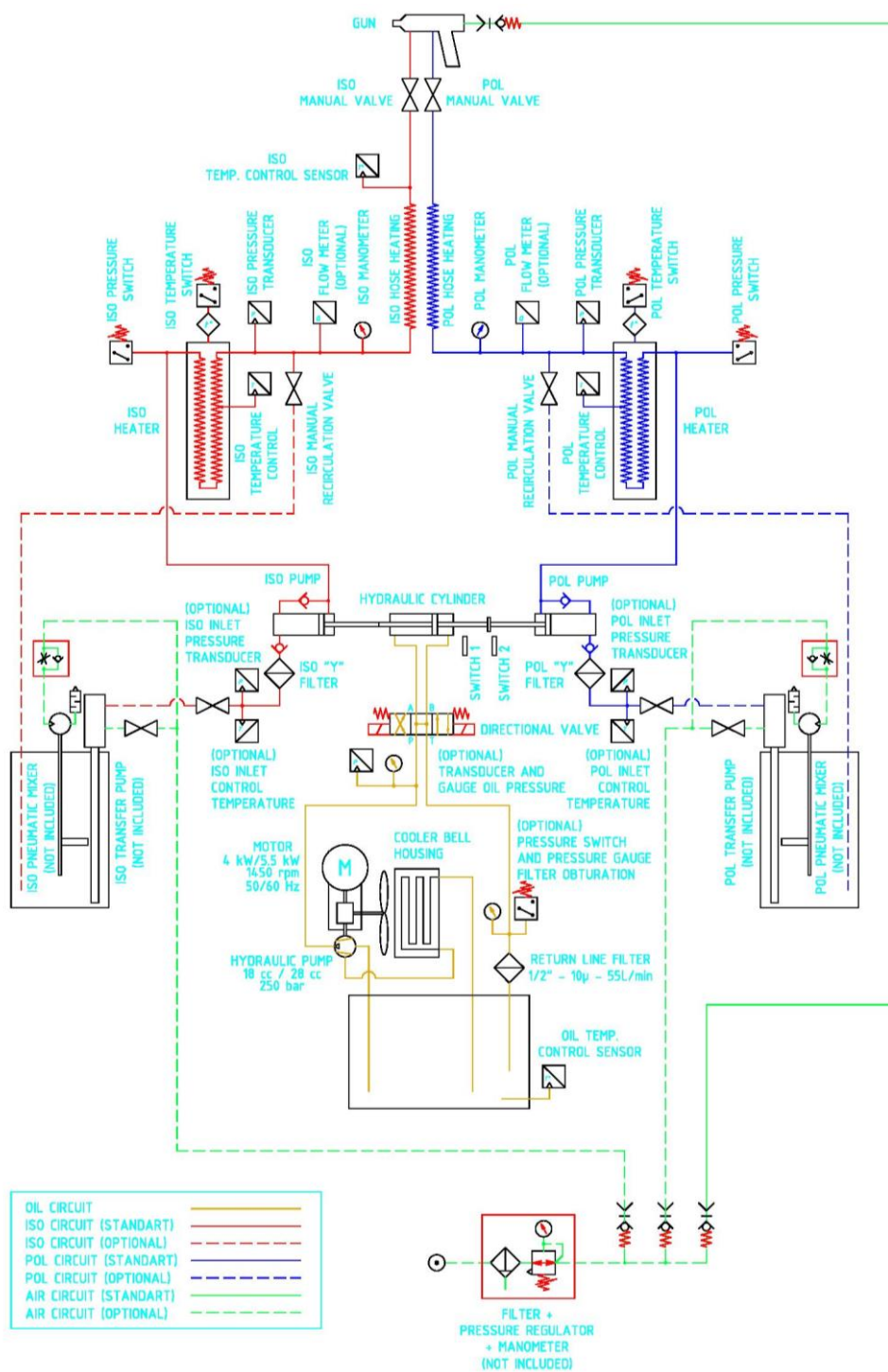
## HYDRAULIC SCHEMATIC DIAGRAM



|                | <i><b>G-Connect</b></i> | <i><b>G-Connect+</b></i> |
|----------------|-------------------------|--------------------------|
| Motor          | 4 kW                    | 5.5 kW                   |
| Hydraulic Pump | 18 cc                   | 28 cc                    |

**Figure 42. Hydraulic Schematic Diagram**

## FUNCTIONING SCHEMATIC DIAGRAM



**Figure 43. Functioning Schematic Diagram**



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