

# Company Standard of the Rösler - Group

General delivery specifications of the company "Rösler Group" to suppliers

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## 1. Area of application

The "**Rösler Company Standard**" regulates the delivery regulations for purchased components for all suppliers of Rösler Oberflächentechnik GmbH and Rösler Holding GmbH.

In the context of this company standard, the following is to be understood by **purchased component**:

- Any "**machine**" in the sense of the EC Machinery Directive 2006/42/EC.
- Any "**functional unit**" designated by Rösler Oberflächentechnik GmbH as a "purchased component".

## 2. Documentation

All documentation must be prepared by suppliers of Rösler Oberflächentechnik GmbH in accordance with the **EC Machinery Directive 2006/42/EC**, taking into account the applied harmonized standards EN ISO 12100:2011-03.

If no special delivery specifications for documentation are attached to the inquiry/order (Appendix 2 - "Special delivery specification for documentation"), the general specifications described in points 2.1 to 2.7 shall apply.

### 2.1 Operating instructions

Operating instructions in the national language of the place of use in one copy on an electronic data carrier (USB) in the \*.docx file format.

The operating instructions must include the complete parts list of the component (with order number and manufacturer).

If the national language of the place of use is not German, versions in German must also be supplied.

## **2.2 Circuit diagram**

Circuit diagram in the national language of the place of use in one copy on an electronic data carrier (USB) in the file format of the CAE system E-Plan P8.

The circuit diagram must include the complete parts list of the component (with order number and manufacturer).

If the national language of the place of use is not German, versions in German must also be supplied.

Safety of machines – electrical equipment of machines according DIN – EN -60204 – 1

Tia – project must be supplied provided

After the machine has finally been put into operation at Rösler, the supplier must carry out a measurement and test in accordance with VDE 0113/EN 60204-1 and hand over the documentation to Rösler.

## **2.3 Hydraulic plan**

Hydraulic plan in the national language of the place of use in one copy on an electronic data carrier (USB) in the \*.dxf file format.

The circuit diagram must include the complete parts list of the component (with order number and manufacturer).

If the national language of the place of use is not German, versions in German must also be supplied.

## **2.4 Pneumatic plan**

Pneumatic plan in the national language of the place of use in one copy on an electronic data carrier (USB) in the \*.dxf file format.

The circuit diagram must include the complete parts list of the component (with order number and manufacturer).

If the national language of the place of use is not German, versions in German must also be supplied.

## 2.5 Risk assessment

The risk assessment to be prepared by the supplier for purchased components must be forwarded to Rösler Oberflächentechnik GmbH without being requested to do so, namely in one copy on an electronic data carrier (USB) in the \*.docx or \*.xlsx file format.

Furthermore, all safety-related data for the electrical components used which are required for the SISTEMA calculation must be forwarded along with the risk assessment.

If the national language of the place of use is not German, versions in German must also be supplied.

## 2.6 Total costs of ownership

The supplier shall determine the **total costs of ownership** for purchased components and notify Rösler thereof (in triplicate in paper form as well as one copy on an electronic data carrier (CD, DVD) in the \*.doc or \*.xls file format). This includes the complete costs for the acquisition, use, maintenance and disposal of the purchased component as they are expected to be incurred during its useful life. In addition, Rösler must be provided with a list of all wearing parts of the purchased component, including the service life.

If the national language of the place of use is not German, versions in German must also be supplied.

## 2.7 Contact for documentation

	<b>Technology division</b>	<b>CE-Coordinator</b>
Delivery documentation and in case of further inquiries	<b>Heiko Weidner</b> E-mail: h.weidner@rosler.com Tel.: 09533 / 924 – 628 Fax.: 09533 / 924 – 300	<b>Michael Heymann</b> E-mail: Mi.Heymann@rosler.com Tel.: 09533 / 924 – 563 Fax.: 09533 / 924 – 300

## **3. Specified components and suppliers**

### **3.1 General provisions**

For purchased components supplied to a country other than Germany, the **warranty** shall always apply to the country of final destination. Alternatively, a warranty bond can also be used.

The components and suppliers which are to be used by the supplier for purchased components are listed in the following. The use of components and suppliers which are not included in the "Rösler Company Standard" requires the written approval of Rösler.

### **3.2 Electrical system**

Contactors	Siemens Sirius 3RT2... / 3RH2...
Time relays	Siemens Sirius 3RP...
Pushbuttons/indicators	Siemens 3SU1000
Circuit breakers/motor protection switches	Siemens Sirius 3RV2...
Main switches / Power switch	≤ 160A Sontheimer, >160A Siemens / Eaton NZM
Terminal blocks	Phoenix Push in
Connectors	Harting
Lines	Lapp, ÖLFLEX cable or equivalent
Fittings	Lapp Skintop or equivalent
Plastic with strain relief	
Limit switches, mechanical	Siemens
Limit switches, electronic ind.	pluggable, Balluff / IFM
Limit switches, electronic cap.	pluggable, Balluff / IFM
Frequency converters	Siemens G120C / G120
Transformer	no specification
Power supply	Siemens 6EP1...
Decentralized periphery:	Cube67 (preferred types)

	in coordination with Rösler)
	ET200SP
Emergency stop relays	Dold / Pilz
Cooling units	Rittal
Control cabinet	Rittal / Schneider Electric min IP55
Light barriers/ Light buttons	pluggable, preferably M18x1
Limit switches, pneum. Cylinders	Festo pluggable, SMT-8M
Coupling relays	Finder
Safety limit switches	Schmersal / Euchner
Circuit breakers	Siemens 5SY...

### **3.3 Control system**

PLC control system	Siemens S7 - 1200 / 1500
PLC control unit	Siemens KTP400 / 700 Basic TP900 Comfort
Bus systems	Profinet

### **3.4 General electrical data**

Supply voltage	400/230V 50Hz 3Ph/N/PE
Neutral	with
Finishing control cabinet/frame	RAL 7035
Control voltage, general, PLC	24 V DC
Wiring colors	according to EN
Electrical components	label permanently 2-fold as per circuit Diagram Wire / operating material

Interference elimination from components	for contactors and solenoid valves
Pluggable connection with LED	for solenoid valves, incl. cap. limit switch and light barrier
Vibrations motor	connecting line vibration consistent
Lamp	LED-technics 230 V 50 HZ
Fan motor e.g. soundproof cabin	400 V 50 Hz 3Ph/PE
Motor with bracket	400 V 50 Hz 3 Ph/PE
Nameplate	e.g. motors readable from outside or second nameplate
Reserve space	at least 10%

### **3.5 Mechanics**

Signs	bilingual, in national language and German; riveted
Gearboxes (motors)	Getriebebau Nord, SEW, Siemens
Bearings	INA, FAG, SKF
Coloring	according to "Rösler Standard Color" <b>Blasting technology:</b> Machine housing and non-moving components RAL 7015 (slate gray) structure, moving system parts, doors and maintenance flaps RAL 2010 (signal orange) structure, switching equipment RAL 7035 (light gray) structure  <b>Mass finishing:</b> Systems 2-color RAL 7035 (light gray) / RAL 7015 (slate gray) structure, Control cabinets and switching equipment RAL 7035 (light gray) structure

### **3.6 Hydraulics**

Hydraulic unit	Bosch
Hydraulic cylinder	Bosch
Hydraulic valves	Bosch
Hydraulic hoses	Bosch
Part-turn/multi-turn actuators	Bosch

### **3.7 Pneumatics**

Valve islands	Festo
Pneumatic valves	Festo
Pneumatic cylinders	Festo
Pneumatic hoses	Festo
Pneumatic drives	Festo