

Company Standard of the Rösler[®] - Group

Werksnorm der Rösler Gruppe

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

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

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

Cooling units

Control cabinet

Light barriers/

Light buttons

Limit switches, pneum. Cylinders

Coupling relays

Safety limit switches

Circuit breakers

Dold / Pilz

Rittal

Rittal / Schneider Electric min

IP55

pluggable, preferably M18x1

Festo pluggable, SMT-8M

Finder

Schmersal / Schneider Electric

Siemens 5SY...

3.3 Control system

PLC control system

PLC control unit

Bus systems

Siemens S7 - 1200 / 1500

Siemens KTP400 / 700 Basic
TP900 Comfort

Profinet

3.4 General electrical data

Supply voltage

Neutral

Finishing control cabinet/frame

Control voltage, general, PLC

Wiring colors

Electrical components

400/230V 50Hz 3Ph/N/PE

with

RAL 7035

24 V DC

according to EN

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.

Vibrations motor

Lamp

Fan motor e.g. soundproof cabin

Motor with bracket

limit switch and light barrier

connecting line vibration consistent

LED-technics 230 V 50 HZ

400 V 50 Hz 3Ph/PE

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"

Blasting technology:

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

Mass finishing:

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

Pneumatic hoses

Pneumatic drives

Festo

Festo

Festo