



### Installation with a system

## Installation with a system... ...meets all protection degrees between IP65 and IP68

on ocean liners or at industrial sites: electrical installations requiring increased degrees of protection are becoming more common. It is extremely important, particularly in these areas, that the installation is performed by an expert. But how

does it work in practice?

Whether in mechanical engineering,

Difficult installation conditions and severe time pressure can often lead to errors, loss of protection and finally to the failure of the system.

As a complete installation system, **gesis** IP+ is optimally adapted to these increased requirements. It is very flexible in its application and has proven technology at its disposal. These factors are necessary prerequisites for a reliable and safe installation solution in the field. The choice of system components offers solutions for each type of installation. Initial installations as well as modifications and additions, can quickly be implemented according to the "Lego principle". This is an

#### The system

#### **Components and functions**

Connectors for

self-assembly = Incoming

supply

Distribution blocks with

mounting facilities = Distribution

Cable

assemblies

= Routing

**Appliance** 

connectors

Connection to consumer devices





important point in reducing operational downtimes to a minimum.

As a market innovation, **Wieland** transfers the successful **gesis** installation philosophy into a new market segment and sets new standards.

See for yourself!

#### Design and benefits of RST 20i3

IP65...IP68

= Use in rough environments

20 A

= Wide area of applications

Spring and

screw technology

= Simple and safe

connection

Precise number of

parts

= Minimum

assembly effort

## **RST 20i3**

Mains, 3 pole, IP65...IP68

#### The *gesis* installation philosophy:

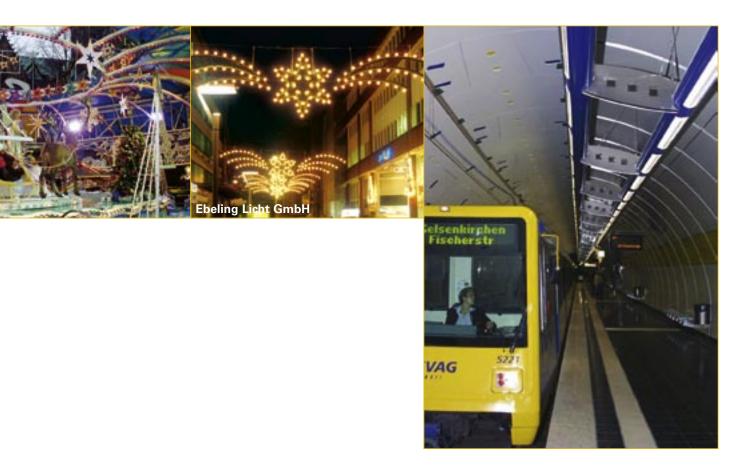
The idea is as simple as it is brilliant. An extensive network of preassembled and completely tested components of electrical connection technology enables a consistently pluggable solution from the distribution panel to each device.

This saves time and reduces the costs!

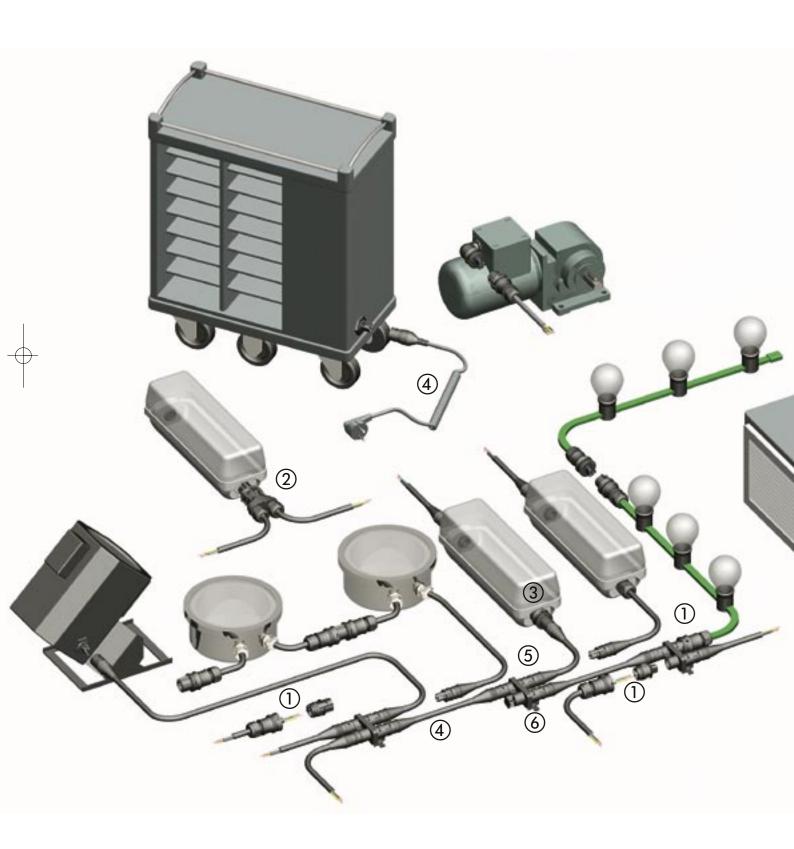
A large number of well-known manufacturers have recognized this positive trend and, as system partners, already offer their components with pluggable **gesis** connectors. The system's fields of application are as versatile as the system itself. In short: Wherever electrical power or signals need to be distributed, **gesis** has set a standard.

#### Areas of application

- Parking garages, underground garages
- Airports
- Warehouses, stadiums
- Gas stations, tunnel construction
- Greenhouses, elevator technology
- Temporary lighting for building sites
- Industrial plants, car washes
- Fairground business, marquees
- Shipbuilding
- Traffic signals
- Device and appliance construction
- Train stations, kiosks
- Street lighting, crane technology
- Light signs
- Decorative lighting







## **RST 20i3**

Mains, 3 pole, IP65...IP68

#### (1) Connectors

technology.

Connectors can be pre-assembled wired. Among other functions they serve as an incoming supply for the *gesis* IP+ system.

Connectors with male and female components are delivered complete with strain relief and are compatible with all common cable types. A special variation also enables the installation of illumination cables for decorative lighting systems.

Depending on the requirement, the connectors are available with spring-loaded or screw



#### (2) Splitter connectors

Connectors can be pre-assembled on site and are designed for daisy-chaining lighting fixtures. All connectors are delivered complete with strain relief and are compatible with all common cable types. Depending on the requirement, the connectors are available with spring-loaded or screw technology.

#### **3** Appliance connectors

Appliance couplers are integrated directly into device housings. They are the device's interface to the *gesis* IP+ system. The devices can therefore be simply plugged in on site and integrated into the installation. Two springloaded connections are available per pole for internal wiring.

#### (4) Cable assemblies

Electrical power is supplied by using these cable assemblies.

Three basic versions are available:

Mains connection cables provide the incoming supply of the **gesis** IP+ system. They have been prepared for a traditional connection on the supply side and are pre-assembled with the required female connector on the outgoing side. Extension cables are preassembled with a female or male connector on the relevant cable ends designed for feed-through wiring. A connection cable is pre-assembled with a male connector and a free end for wiring to the consumer device.

#### (5) Distribution blocks

The pre-assembled plug-in distribution blocks are designed for tapping off to the consumer devices. The distribution block is available with or without mounting flanges.

#### (6) End caps

Are used to safely cover open contacts. The IP protection is therefore maintained when the device is unplugged.



### **Connectors**

	Connector	Connector	Splitter connector	Splitter connector
	with spring-loaded connection for rigid cables of 0.5 – 2.5 mm², fine-stranded cables of 0.5 - 1.5 mm² with ferrules, stranded cables of 0.75 – 1.5 mm² with ferrules. Unassembled with cable gland¹¹ and locking device.	with screw connection <sup>2)</sup> for rigid, fine-stranded and stranded cables of 0.75 – 4.0 mm <sup>2</sup> . Unassembled with cable gland <sup>1)</sup> and locking device.	with spring-loaded connection, for rigid cables of 0.5 – 2.5 mm², fine-stranded cables of 0.5 – 1.5 mm² with ferrules, stranded cables of 0.75 – 1.5 mm² with ferrules. Unassembled with cable gland¹¹ and locking device.	with screw connection <sup>2)</sup> for rigid, fine-stranded and stranded cables of 0.75 mm <sup>2</sup> – 2.5 mm <sup>2</sup> . Unassembled with cable gland <sup>1)</sup> and locking device.
	See "Technical Data" for sheath and insulation strip lengths as well as the ferrules to be used.	See "Technical Data" for sheath and insulation strip lengths.	See "Technical data" for insulation and sheath strip lengths as well as the ferrules that are to be used.	See "Technical data" for insulation ar sheath strip lengths.
Cable Color	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack
Female connector	@347	SW27	38 59	SW 27
Ø 6 – 10 mm gray black	96.031.0053.0 96.031.0053.1	96.031.4053.0 96.031.4053.1	96.031.0253.0 96.031.0253.1	96.031.4253.0 96.031.4253.1
Ø 10 – 14 mm gray black	96.031.0153.0 96.031.0153.1	96.031.4153.0 96.031.4153.1	96.031.0353.0 96.031.0353.1	96.031.4353.0 96.031.4353.1
Male connector	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	Part No.
Ø 6 - 10 mm gray	96.032.0053.0 96.032.0053.1	96.032.4053.0 96.032.4053.1		
Ø 10 - 14 mm         gray           № врам         № 10 - 14 mm	96.032.0053.1 96.032.0153.0	96.032.4053.1 96.032.4153.0		
for illumination cable <sup>3</sup> gray	96.032.0153.1 96.022.0453.0 96.032.0453.1	96.032.4153.1 96.022.4453.0 96.032.4453.1		
H05RNH2-F 2 x 1.5 mm <sup>2</sup> black	96.022.0453.1  1) Cable gland with bend protection available of 2) With wire protection available on request	96.022.4453.1 on request		l .
	With wire protection available on request     Ground contact not equipped			
320				

## **Appliance connectors**

# **RST 20i3**

	1101 2013			
	Appliance connector standard, M25	Appliance connector standard, M25	Appliance connector modular, M20	Appliance connector modular, M20
	with spring-loaded connection for rigid cables of 0.5 – 2.5 mm², fine-stranded cables of 0.5 – 1.5 mm² with ferrules, stranded cables of 0.75 – 1.5 mm² with ferrules. 2 connection points per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M25x1.5 thread, external cable	with screw connection <sup>2)</sup> for rigid, fine-stranded and stranded cables of 0.75 – 4.0 mm <sup>2</sup> with ferrules. 1 connection point per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M25x1.5 thread, external cable gland.	with spring-loaded connection for rigid cables of 0.5 – 2.5 mm², fine-stranded cables of 0.5 – 1.5 mm² with ferrules, stranded cables of 0.75 – 1.5 mm² with ferrules, 2 connection points per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M20x1.5 thread, internal cable gland.	with screw connection <sup>2)</sup> for rigid, fine-stranded and stranded cables of 0.75 – 4.0 mm <sup>2</sup> with ferrules.  1 connection point per pole. With locking device. Fixing in position guaranteed by flattening the thread. With M20x1.5 thread, internal cable gland.
	gland. See "Technical Data" for insulation strip lengths and the ferrules to be used.	See "Technical Data" for insulation strip lengths.	See "Technical Data" for insulation strip lengths and the ferrules to be used.	See "Technical Data" for insulation strip lengths.
Color <b>Female</b>	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack
connector		11,7 +0,2 with the second of	30 30 30 80 80 80 80 80 80 80 80 80 8	8,7 +0,2 Ø21,75 ±1,25
gray black	96.031.1053.0 96.031.1053.1	96.031.5053.0 96.031.5053.1	96.031.2053.0 96.031.2053.1	96.031.6053.0 96.031.6053.1
Color	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack
Male connector		SW 32 SW 32 Ø 25,50 ± 0,25	SW26  SW26  SW26  SW26  SW26	021,75 ±1,25
			3	
gray black	96.032.1053.0 96.032.1053.1	96.032.5053.0 96.032.5053.1	96.032.2053.0 96.032.2053.1	96.032.6053.0 96.032.6053.1

## Cable assemblies, 1.5 mm<sup>2</sup>

			Extension cable	Connection cable	Connection cable
			3 x 1.5 mm <sup>2</sup>	3 x 1.5 mm²	3 x 1.5 mm²
			Female – Male with locking device	Female – Free end with ultrasonically welded wire ends <sup>31</sup> Sheath strip length: 35 mm Insulation strip length: 9 mm Cable diameter <sup>31</sup> : HO5VV: 7.4 – 9.4 mm HO7RNF: 9.2 – 11.9 mm	Male – Free end with ultrasonically welded wire ends and locking device Sheath strip length: 35 mm Insulation strip length: 9 mm Cable diameter <sup>31</sup> : HO5VV: 7.4 – 9.4 mm HO7RNF: 9.2 – 11.9 mm
	Cable assemblies		925	9 25	9 25
Cable 1)	Color	Length <sup>2)</sup>	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack
H05VV —	gray Cable: black	1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.232.1000.0 96.232.2000.0 96.232.3000.0 96.232.4000.0 96.232.5000.0 96.232.6000.0 96.232.7000.0 96.232.8000.0	96.232.1003.0 96.232.2003.0 96.232.3003.0 96.232.4003.0 96.232.5003.0 96.232.6003.0 96.232.7003.0 96.232.8003.0	96.232.1004.0 96.232.2004.0 96.232.3004.0 96.232.4004.0 96.232.5004.0 96.232.6004.0 96.232.7004.0 96.232.8004.0
	black  Cable: black	1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.232.1000.1 96.232.2000.1 96.232.3000.1 96.232.4000.1 96.232.5000.1 96.232.6000.1 96.232.7000.1 96.232.8000.1	96.232.1003.1 96.232.2003.1 96.232.3003.1 96.232.4003.1 96.232.5003.1 96.232.6003.1 96.232.7003.1 96.232.8003.1	96.232.1004.1 96.232.2004.1 96.232.3004.1 96.232.4004.1 96.232.5004.1 96.232.6004.1 96.232.7004.1 96.232.8004.1
H07RNF -	gray Cable: black	1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.232.1030.0 96.232.2030.0 96.232.3030.0 96.232.4030.0 96.232.5030.0 96.232.6030.0 96.232.7030.0 96.232.8030.0	96.232.1033.0 96.232.2033.0 96.232.3033.0 96.232.4033.0 96.232.5033.0 96.232.6033.0 96.232.7033.0 96.232.8033.0	96.232.1034.0 96.232.2034.0 96.232.3034.0 96.232.4034.0 96.232.5034.0 96.232.6034.0 96.232.7034.0 96.232.8034.0
	black  Cable: black	1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.232.1030.1 96.232.2030.1 96.232.3030.1 96.232.4030.1 96.232.5030.1 96.232.6030.1 96.232.7030.1 96.232.8030.1	96.232.1033.1 96.232.2033.1 96.232.3033.1 96.232.4033.1 96.232.5033.1 96.232.6033.1 96.232.7033.1 96.232.8033.1	96.232.1034.1 96.232.2034.1 96.232.3034.1 96.232.4034.1 96.232.5034.1 96.232.6034.1 96.232.7034.1 96.232.8034.1

<sup>&</sup>lt;sup>1)</sup> Other cables available on request <sup>2)</sup> Other lengths available on request <sup>3)</sup> According to VDE0281, T5 and VDE0288, T4

### Cable assemblies, 2.5 mm<sup>2</sup>

# **RST 20i3**

Mains, 3 pole, IP65...IP68

	Extension cable	Connection cable	Connection cable	
	3 x 2.5 mm²	3 x 2.5 mm²	3 x 2.5 mm²  Male – Free end with ultrasonically welded wire ends and locking device Sheath strip length: 35 mm Insulation strip length: 9 mm Cable diameter³: HO5VV: 9.2 – 11.4 mm HO7RNF: 10.9 – 14.0 mm	
	Female – Male with locking device	Female – Free end with ultrasonically welded wire ends <sup>31</sup> Sheath strip length: 35 mm Insulation strip length: 9 mm Cable diameter <sup>32</sup> : HO5W: 9.2 – 11.4 mm HO7RNF: 10.9 – 14.0 mm		
		Ø 25	9 25	
Length <sup>2)</sup>	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	
1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.233.1000.0 96.233.2000.0 96.233.3000.0 96.233.4000.0 96.233.5000.0 96.233.6000.0 96.233.7000.0 96.233.8000.0	96.233.1003.0 96.233.2003.0 96.233.3003.0 96.233.4003.0 96.233.5003.0 96.233.6003.0 96.233.7003.0 96.233.8003.0	96.233.1004.0 96.233.2004.0 96.233.3004.0 96.233.4004.0 96.233.5004.0 96.233.6004.0 96.233.7004.0 96.233.8004.0	
1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.233.1000.1 96.233.2000.1 96.233.3000.1 96.233.4000.1 96.233.5000.1 96.233.6000.1 96.233.7000.1 96.233.8000.1	96.233.1003.1 96.233.2003.1 96.233.3003.1 96.233.4003.1 96.233.5003.1 96.233.6003.1 96.233.7003.1 96.233.8003.1	96.233.1004.1 96.233.2004.1 96.233.3004.1 96.233.4004.1 96.233.5004.1 96.233.6004.1 96.233.7004.1 96.233.8004.1	
1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.233.1030.0 96.233.2030.0 96.233.3030.0 96.233.4030.0 96.233.5030.0 96.233.6030.0 96.233.7030.0 96.233.8030.0	96.233.1033.0 96.233.2033.0 96.233.3033.0 96.233.4033.0 96.233.5033.0 96.233.6033.0 96.233.7033.0 96.233.8033.0	96.233.1034.0 96.233.2034.0 96.233.3034.0 96.233.4034.0 96.233.5034.0 96.233.6034.0 96.233.7034.0 96.233.8034.0	
1.0 m 2.0 m 3.0 m 4.0 m 5.0 m 6.0 m 7.0 m 8.0 m	96.233.1030.1 96.233.2030.1 96.233.3030.1 96.233.4030.1 96.233.5030.1 96.233.7030.1 96.233.8030.1	96.233.1033.1 96.233.2033.1 96.233.3033.1 96.233.4033.1 96.233.5033.1 96.233.6033.1 96.233.7033.1 96.233.8033.1	96.233.1034.1 96.233.2034.1 96.233.3034.1 96.233.4034.1 96.233.5034.1 96.233.6034.1 96.233.7034.1 96.233.8034.1	



### **Distribution**

	Distribution block, 1E/3A	Distribution box		End caps
	with locking device, 1 input, male connector, 3 pole, 3 outputs, female connector 3 pole	The individual distribution boxes offer optimum solutions for your specific application.  The distribution boxes are available in different dimensions and can accept DIN rail mounted devices and terminal blocks in any combination. Further connection to the consumer devices is accomplished by the gesis IP+ connector system. Distribution blocks manufactured and tested according to specific customer requirements can be delivered to the construction site as pre-assembled components.  The locking devices are already integrated.		For safely covering open male or female connectors.
Color	Part No. Std. Pack	Part No. Std. Pack		Part No. Std. Pack
With mounting flange	58 58 58 58 58 58 58 58 58 58		For covering open male connectors	Ø 30 6.17
gray black	96.030.0153.0 96.030.0153.1	available on request available on request		05.564.4453.0 05.564.4453.1
Color	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack	Part No. Std. Pack
Without mounting flange	68		For covering open female connectors	90°62 Ø 23,4
gray black	96.030.0253.0 96.030.0253.1			Z5.564.4553.0 Z5.564.4553.1
324				



# **RST 20i3**

Mains, 3 pole, IP65...IP68

### RST 5 pole Sample kit Extension of the existing system RST20i3 with a 5 pole variant. Its extremely compact design makes the system so Contents: outstanding. The connector consists - Connector of only two individual parts and is - Appliance couplers extraordinarily installation-friendly. - Distribution boxes Components: - Cable assemblies Connector, device connections and pre-assembled cables - Locking pieces - Individual customized distribution boxes available on request Part No. Std. Pack Part No. Std. Pack Electrical installations in the field of functional, mechanical and system engineering are the main areas of application. 99.488.0000.0 Part No. Std. Pack Part No. Std. Pack Mounting flange for splitter connectors 01.006.1553.1 01.006.1553.0 325