DNV·GL

Certificate No:
TAE000048K

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Connection System

with type designation(s)
Serie ®CLASSIC RST20i.., RST25i.., Serie ®MINI RST16i.., Serie ®MICRO RST08i..

Issued to
Wieland Electric GmbH
Bamberg, Bayern, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2021-02-25**
This Certificate is valid until **2026-02-24**.
DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Holger Jansen**

Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

Series RST20i..., RST25i…, RST16i... and RST08i… cable connecting system, build in connectors and distribution boxes and accessories.

Material
Insulating housing: Thermoplastic PA
Contacts: Brass with silver finish
Sealing: NBR

Ratings
RST25i3: 250V, 25A
RST25i5: 250/400V, 25A
RST20i2, RST20i3: 250V, 20A
RST20i4, RST20i5: 250/400V, 20A
RST16i2, RST16i3, RST16i4, RST16i5: 250/400V, 16A
RST08i2, RST08i3: 250/400V, 8A

Type designation code connector system RST25i3 and RST23i5 and end caps
Rewirable connector with screw terminals

RST25i	5	SB1	Z	R1	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST25i
II	Number of Poles	3 or 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SS1 = single screw terminal provided with male contact
IV	Cord anchorage	Z = with cord anchorage
V	Cord anchorage variations	R1 = round cable, single cord 6.4mm - 10mm
		R2 = round cable, single cord 10mm - 11.2mm
		R3 = round cable, single cord 12.1mm - 16.8mm
		RX = round cable, double cord 6.4mm - 10mm
		RY = round cable, double cord 10mm - 11.2mm
VI	Retaining means	V = with retaining means
VII	Colour / Coding	BG = concrete-grey (RAL 7023)

Type designation connector system RST25i3 and RST25i5 and end caps
Built-in connector rewirable with screw terminals

RST25i	5	SB1	M0	0	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST25i
II	Number of Poles	3 or 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SS1 = single screw terminal provided with male contact
IV	King of fixing	M0 = metric screw thread straight exit
		M9 = metric screw thread angular exit 90°
V	Extended kind of fixing	0 = M20
		1 = M25
		2 = M32
		3 = M16
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	BG = concrete-grey (RAL 7023)

Type designation code connector system RST20i2 and RST20i3

Rewirable connector with screw- and screwless terminals and end caps

RST20i	3	SB1	Z	R1	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST20i
II	Number of Poles	2 up to 3
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SDB1 = single screw terminal with wire protection, provided with female contact
		SS1 = single screw terminal provided with male contact
		SDS1 = single screw terminal with wire protection, provided with male contact
		FB2 = double screwless terminal provided with female contact
		FS2 = double screwless terminal with male contact
IV	Cord anchorage	Z = with cord anchorage
V	Cord anchorage variations	R1 = round cable, single cord 6.4mm - 10mm
		R2 = round cable, single cord 10mm - 11.2mm
		R3 = round cable, single cord 12.1mm - 16.8mm
		RX = round cable, double cord 6.4mm - 10mm
		RY = round cable, double cord 10mm - 11.2mm
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	GL = light grey (RAL 7035)
		SW = black (RAL 9005)
		BL = light blue (RAL 5012)
		KG = pebble grey (RAL 7032)
		BR = brown (RAL 8002)
	Colour / Coding for 250 / 400 V	GN = green (RAL 6002)

Type designation code connector system RST20i2 and RST20i3

Distribution blocks and end caps

RST20i	3	V	3P1	__	F	V	GL
I	II	III	IV	V	VI	VII	VIII

I	Basic Type Designation	RST20i
II	Number of Poles	2 up to 3
III	Block or coupler type	V = distribution blocks
IV	Number of channels	3P1 = one male input with three female outputs
V	Configuration of distribution block	No suffix = standard form
VI	Mounting means	No suffix = standard form
		F = screw type mounting
		R = snap-in facility
VII	Retaining means	V = with retaining means
VIII	Colour / Coding for 250V	GL = light grey (RAL 7035)
		SW = black (RAL 9005)
		BL = light blue (RAL 5012)
		KG = pebble grey (RAL 7032)
		BR = brown (RAL 8002)
	Colour / Coding for 250/400V	GN = green (RAL 6002)

End caps 05.564.4453.0/1 and Z5.564.4453.0/1 for male and female outputs.

Type designation code connector system RST20i2 and RST20i3
Built-in connector rewirable with screw- and screwless terminals and end caps

RST20i	3	SB1	M0	0	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST20i
II	Number of Poles	2 up to 3
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SDB1 = single screw terminal with wire protection, provided with female contact
		SS1 = single screw terminal provided with male contact
		SDS1 = single screw terminal with wire protection, provided with male contact
		FB2 = double screwless terminal provided with female contact
		FS2 = double screwless terminal with male contact
IV	King of fixing	M0 = metric screw thread straight exit
		M1 = metric screw thread angular exit 7°
		M9 = metric screw thread angular exit 90°
V	Extended kind of fixing	0 = M20
		1 = M25
		2 = M32
		3 = M16
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	GL = light grey (RAL 7035)
		SW = black (RAL 9005)
		BL = light blue (RAL 5012)
		KG = pebble grey (RAL 7032)
		BR = brown (RAL 8002)
	Colour / Coding for 250 / 400 V	GN = green (RAL 6002)

Type designation code I connector system RST20i4 and RST20i5 and end caps
Rewirable connector with screw terminals

RST20i	5	SB1	Z	R1	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST20i
II	Number of Poles	4 up to 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SS1 = single screw terminal provided with male contact
IV	Cord anchorage	Z = with cord anchorage
V	Cord anchorage variations	R1 = round cable, single cord 6.4mm - 10mm
		R2 = round cable, single cord 10mm - 11.2mm
		R3 = round cable, single cord 12.1mm - 16.8mm
		RX = round cable, double cord 6.4mm - 10mm
		RY = round cable, double cord 10mm - 11.2mm
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	GL = light grey
		SW = black
		BR = brown (Cod. 1: 50V)
		TB = turquoise blue (Cod. 4: 250/500V)
		BL = light blue (switching operation)

Type designation code II connector system RST20i4 and RST20i5 and end caps
Built-in connector rewirable with screw terminals

RST20i	5	SB1	M0	0	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST20i
II	Number of Poles	4 up to 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SS1 = single screw terminal provided with male contact
IV	King of fixing	M0 = metric screw thread straight exit
		M1 = metric screw thread angular exit 7°
		M2 = metric screw thread angular exit 20°
		M9 = metric screw thread angular exit 90°
V	Extended kind of fixing	0 = M20
		1 = M25
		2 = M32
		3 = M16
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	GL = light grey
		SW = black
		BR = brown (Cod. 1: 50V)
		TB = turquoise blue (Cod. 4: 250/500V)
		BL = light blue (switching operation)

Type designation code I connector system RST16i2 up to RST16i5
Rewirable connector with screw terminals and end caps

RST16i	2	SB1	Z	T4	__	SW
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST16i
II	Number of Poles	2 up to 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female Contact without wire protetion
		SS1 = single screw terminal provided with male contact without wire protection
IV	Cord anchorage	Z = with cord anchorage
V	Cord anchorage variations	T4 = round cable, single cord 6.6mm – 9.5mm
		T6 = round cable, single cord 8.1mm – 10.0mm
		W1 = round cable, single cord 8,7mm – 9,8mm
VI	Retaining means	V = with retaining means
VII	Colour / Coding	GL = grey
		SW = black
		BR = brown (Cod. 3: 50V)
		GN = green
		BL = light blue (Cod. 4: switching operation without PE)
		TB = turquoise blue (Cod. 2: dim)

Type designation code III connector system RST16i2 and RST16i3

Distribution blocks and end caps

RST16i	3	V	2P1	TG	VG	SW
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST20i
II	Number of Poles	2 up to 3
III	Block or coupler type	V = distribution blocks
IV	Number of channels	2P1 = one male input with two female outputs
		2R1 = one male input with two female outputs, series connection
V	Configuration of distribution block (X_) and contact arrangement (_Y)	No suffix = standard form
		T_ = with carrier plate
		_G = contact mixed
VI	Retaining means (X_) and contact surface (_Y)	V_ = with retaining means
		_G = silver plated
VII	Colour	GL = grey
		SW = black
		BR = brown (cod3: 50V)
		GN = green
		BL = light blue (Cod. 4: switching operation without PE)
		TB = turquoise blue (Cod. 2: dim)

Locking pieces for socket Z6.561.7253.0/1 or plug Z6.561.6953.0/1

Type designation connector system RST16i2 up to RST16i5

Built-in connector rewirable with screw terminals and end caps

RST16i	5	SB1	M0	2	V	GL
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST16i
II	Number of Poles	2 up to 5
III	Type of connector and terminal type	SB1 = single screw terminal provided with female contact
		SS1 = single screw terminal provided with male contact
IV	King of fixing	M0 = metric screw thread straight exit
V	Extended king of fixing	2 = M16
		3 = M20,2
VI	Retaining means	V = with retaining means
VII	Colour / Coding for 250 V	GL = grey
		SW = black
		BR = brown (Cod. 3: 50V)
		GN = green
		TB = turquoise blue (Cod. 2: 250/400V)
		BL = light blue (Cod. 4: switching operation)

Type designation code I connector system RST08i2 and RST08i3
Rewirable connector with screw terminals and end caps

RST08i	3	SB1	Z	R1	H	SW
I	II	III	IV	V	VI	VII

I	Basic Type Designation	RST08i
II	Number of Poles	2 up to 3
III	Type of connector and terminal type	S.. = single screw terminal without wire protection
		_B1 = ..female contact
		_S1 = ..male contact
		_11 = ..female contact with contact sealing (longitudinally watertight)
		_21 = ..male contact with contact sealing (longitudinally watertight)
IV	Cord anchorage	Z = with cord anchorage
V	Cord anchorage variations	R1 = round cable, single cord 4.0mm – 7.0mm
VI	Retaining means	H = retaining means with manual release
VII	Colour / Coding	SW = black (deep black – RAL9005)_Cod.1
		BL = blue (light blue – RAL5012)_ Cod.2
		SG = Grey (slate grey – RAL7015)_Cod.3
		KG = grey (pebble grey _ RAL7032)_Cod.4

Locking pieces for socket 06.563.5053.1 or plug 06.563.5153.1

Type designation code II connector system RST08i2 and RST08i3
Built-in connector rewirable with screw terminals and end caps

RST08i	3	S B1	-	M0	2	H	SW
I	II	III	IV	V	VI	VII	VIII

I	Basic Type Designation	RST08i
II	Number of Poles	2 up to 3
III	Type of connector and terminal type	S.. = single screw terminal without wire protection
		_B1 = ..female contact
		_S1 = ..male contact
		_11 = ..female contact with contact sealing (longitudinally watertight)
		_21 = ..male contact with contact sealing (longitudinally watertight)
IV	Kind of anti-twist device	Without = flange with anti-twist device (standard)
V	King of fixing	M0 = metric screw thread straight exit
VI	Extended kind of fixing	2 = M14
VII	Retaining means	H = with retaining means
VIII	Colour / Coding for 250 V	SW = black (deep black – RAL9005)_Cod.1
		BL = blue (light blue – RAL5012)_ Cod.2
		SG = Grey (slate grey – RAL7015)_Cod.3
		KG = grey (pebble grey _ RAL7032)_Cod.4

Locking pieces for socket 06.563.5053.1 or plug 06.563.5153.1

Application/Limitation

Suffices, which are obvious colour, retaining means, i.e., are optional and are not marked on the product.

Installation shall be done in accordance with the installation instructions.

Ingress protection
IP65, IP66, IP66/68 (3m/2h)
IPX9 for RST20ix, x=2, 3, 4, 5
IP56 for RST08ix, RST16ix, x=2, 3

Type Approval documentation

Tests carried out

Applicable tests according to DNV GL Class Guideline CG0339, December 2019.
Environmental tests Location Class for temperature
D: Open deck, masts
A: Machinery spaces, control rooms, Accommodation, bridge - For RST20i2-i3 built-in connectors only
Additional tests:
Dry heat test: +100°C / 16h
Cold test: -40°C / 16h

Marking of product

The products to be marked with:
- Model name
- Manufacturer name

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE