

## 4120.\*\*

### RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR



**Specification** RAST 5 CRIMP CONNECT

**Typology** With Upper Dimple

**For male (mm)** 6,3x0,8

**Wire size mm<sup>2</sup> (AWG)** 0,5-1 (20-18)

**Ø Insulation (mm)** 1,8-2,5

**Materials, temperature and contact resistance**

Part nr.	Material	Finishing	Max. Temp. (°C)	Contact Resist (mΩ)
4120.00	Brass	Natural	110	0.65
4120.01	Brass	Pre-tin-plated	120	0.50
4120.02	Brass	Tin plated	120	0.55
4120.24	Steel	Nickel-plated	300	1.50
4120.30	Bronze	Natural	120	(T.B.D.)
4120.31	Bronze	Pre-tin-plated	130	(T.B.D.)
4120.32	Bronze	Tin plated	130	(T.B.D.)
4120.70	German Silver	Natural	210	2.00

**Material thickness (mm)** 0,4

**Max. rated current**

Wire section	4120.00 / 01 / 02 / 24 / 30 / 31 / 32 / 70
0.50 mm <sup>2</sup>	8A
0.75 mm <sup>2</sup>	10A
1.00 mm <sup>2</sup>	12A

**Insertion / Withdrawal forces**

	4120.00 / 30 / 70	4120.01 / 02 / 24 / 31 / 32
1st Insertion (max)	30N <sup>1</sup>	30N <sup>1</sup>
1st Withdrawal (max)	60N <sup>1</sup>	60N <sup>1</sup>
1st Withdrawal (min)	27N <sup>1</sup>	22N <sup>1</sup>
6th Withdrawal (min)	22N <sup>1</sup>	18N <sup>1</sup>

<sup>1</sup> Valid for Natural Brass Tab

**Application tool** MN4120

**Wire strip length** 5.5 (±0.5) mm

**Crimping parameters & pull out force**

Wire section (±10%)	Conductor		Insulator	Pull-out force (N)
	Height (mm)	Width (mm)		
0.50 mm <sup>2</sup>	1.30 (±0.03)	2.36 (±0.03)	3.47 (±0.10)	56N @ 60s
0.75 mm <sup>2</sup>	1.40 (±0.05)	2.37 (±0.05)	3.47 (±0.10)	84N @ 60s
1.00 mm <sup>2</sup>	1.50 (±0.05)	2.37 (±0.05)	3.48 (±0.10)	108N @ 60s

Values only valid for the application tool specified upwards. The insulator widths are only indicative as they are dependent on the sheath thickness of the wire used.

**Winding number** 8000

**Compatible connectors** P8412\*\*, P8413\*\*, P8414\*\*, P8415\*\*, R5315\*\*-K, R5412\*\*-K, R5413\*\*-K, R5414\*\*-K, R5415\*\*-K, R5416\*\*-K, R5417\*\*-K

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#### Approved regulations

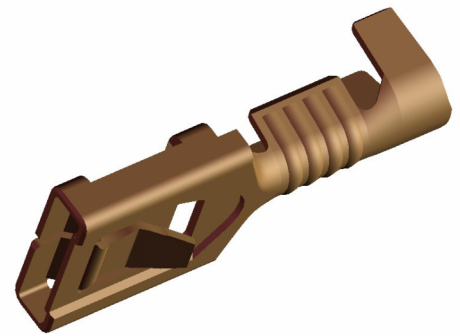
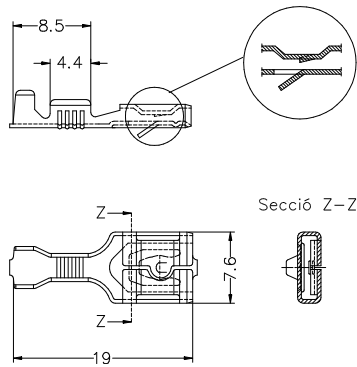
Part nr.	Approval	Standard	File	Certified framework
4120.00	UL	UL 310	E211727	AWG 20-18 (10-16 Stranded Cu) / MN4120
4120.01	UL	UL 310	E211727	AWG 20-18 (10-16 Stranded Cu) / MN4120
4120.02 <sup>1</sup>	UL	UL 1977	E222213	AWG 18 Stranded
4120.24	UL	UL 310	E211727	AWG 20-18 (10-16 Stranded Cu) / MN4120

<sup>1</sup> Cat. No. meets with the standard UL1977 as a component of UP-RAST5 full connection system.  
 Rated current and voltage:  
 4120.02/6434.02 - AWG 18 - 12A/600V (USR) - 10A/600V (CNR)  
 4120.02/6427.02 - AWG 18 - 12A/600V (USR) - 10A/600V (CNR)

#### Approvals



#### Drawing

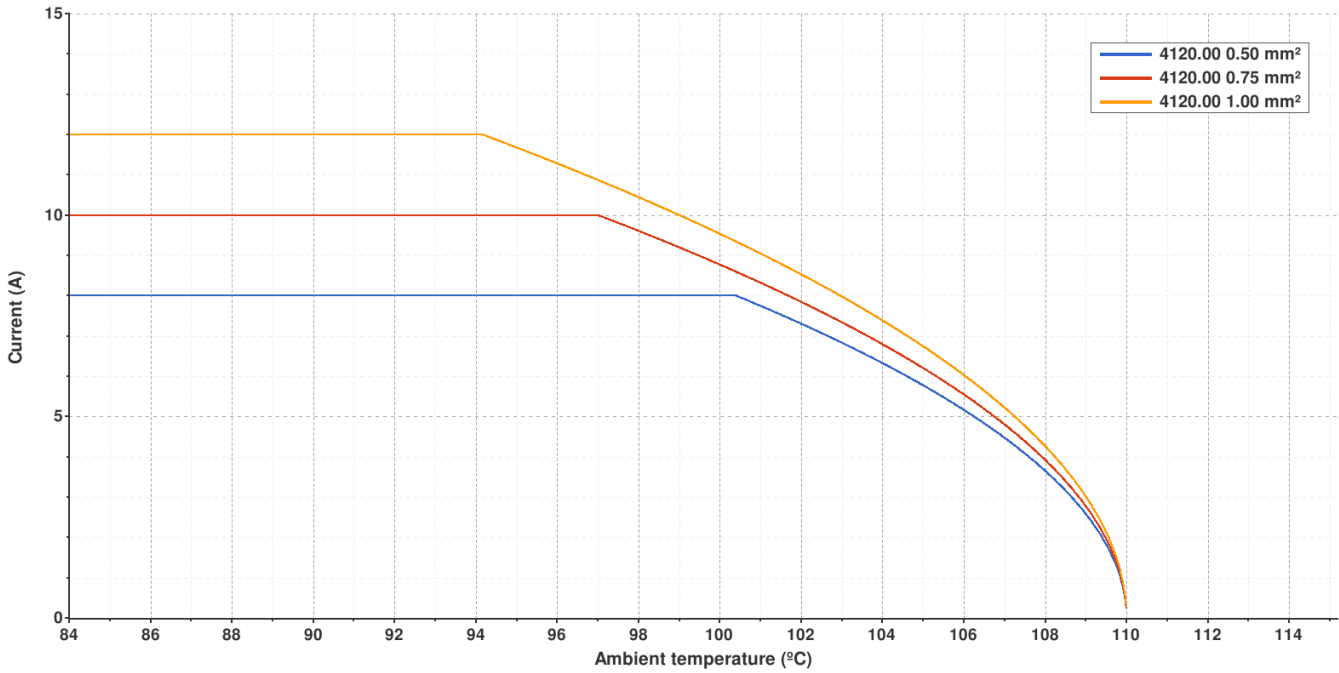


**4120.00 NATURAL BRASS**

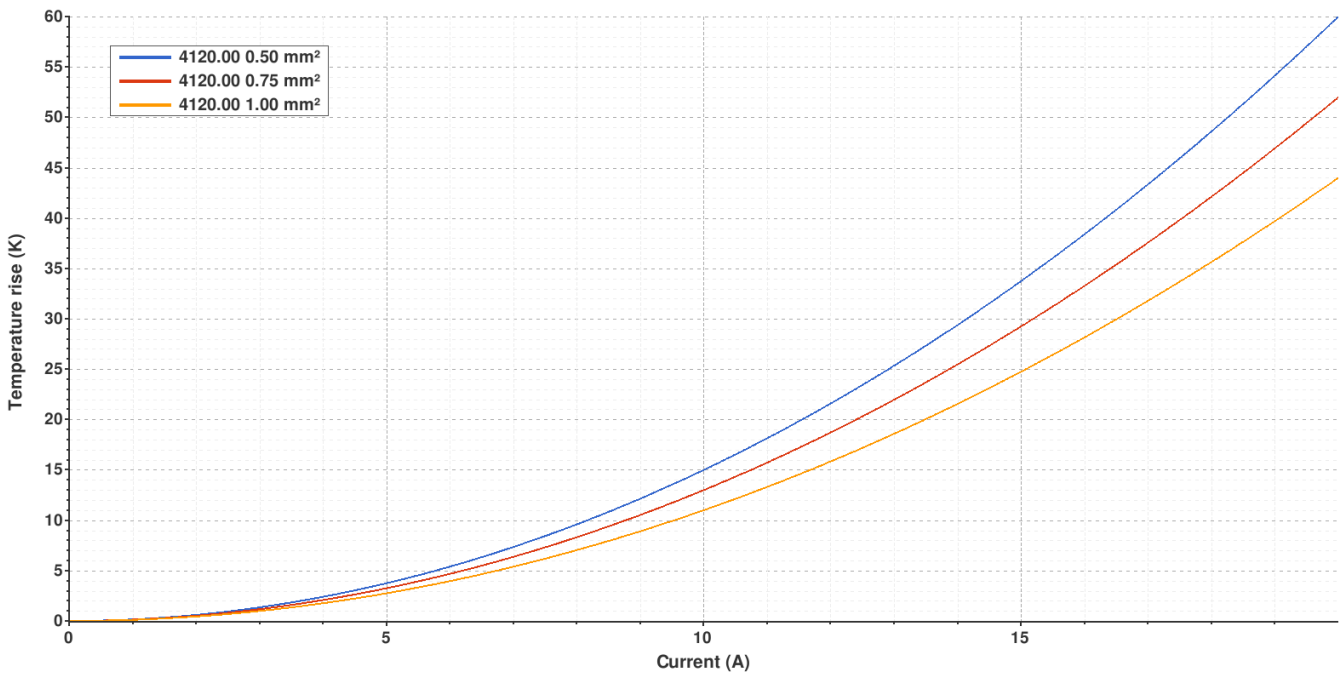


**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**

**Derating curve** Current carrying capacity vs. Ambient temperature



**Temperature rise curve** Terminal temperature rise due to the current carried



Valid for Natural Brass Tab

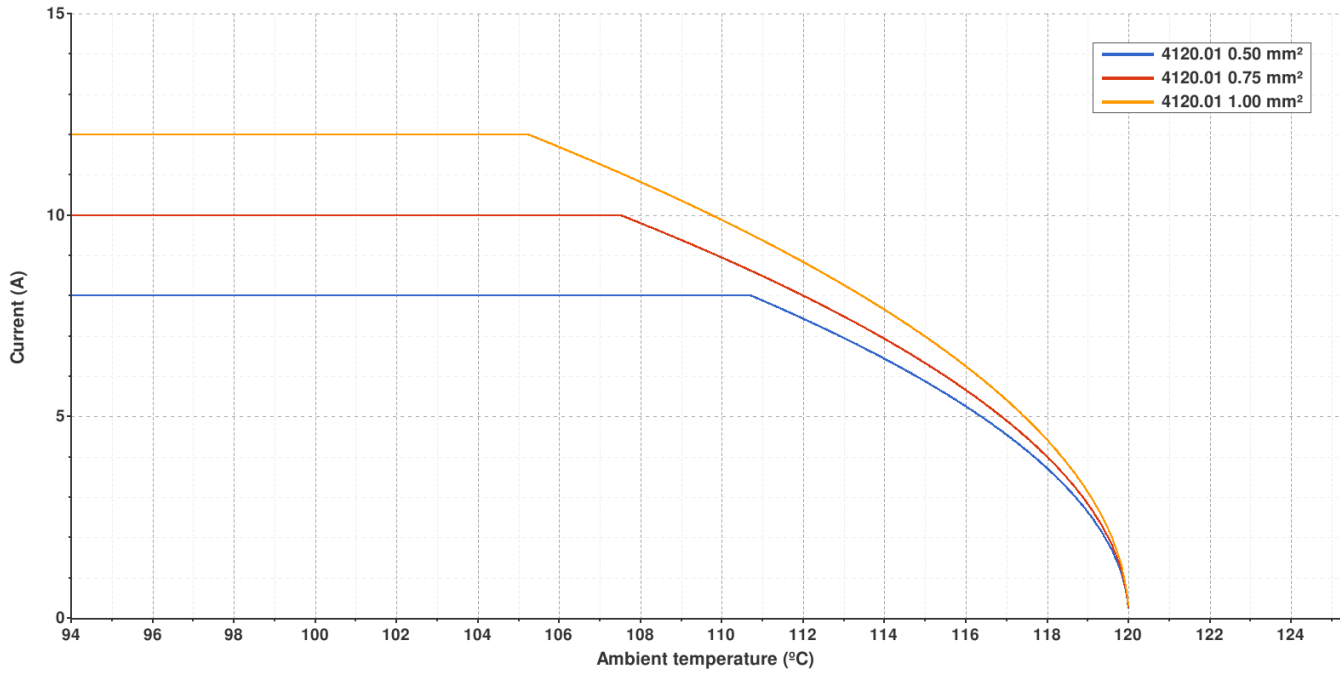
**4120.01 PRE-TIN-PLATED BRASS**

**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**



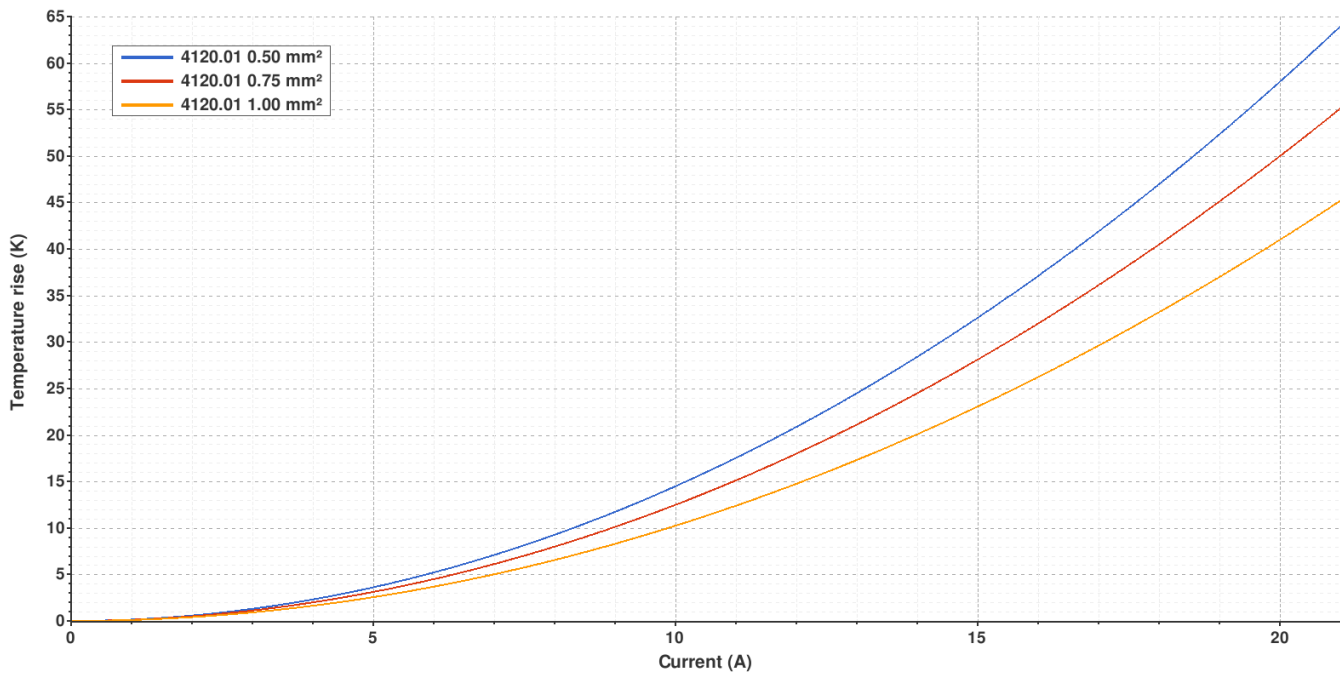
**Derating curve**

Current carrying capacity vs. Ambient temperature



**Temperature rise curve**

Terminal temperature rise due to the current carried



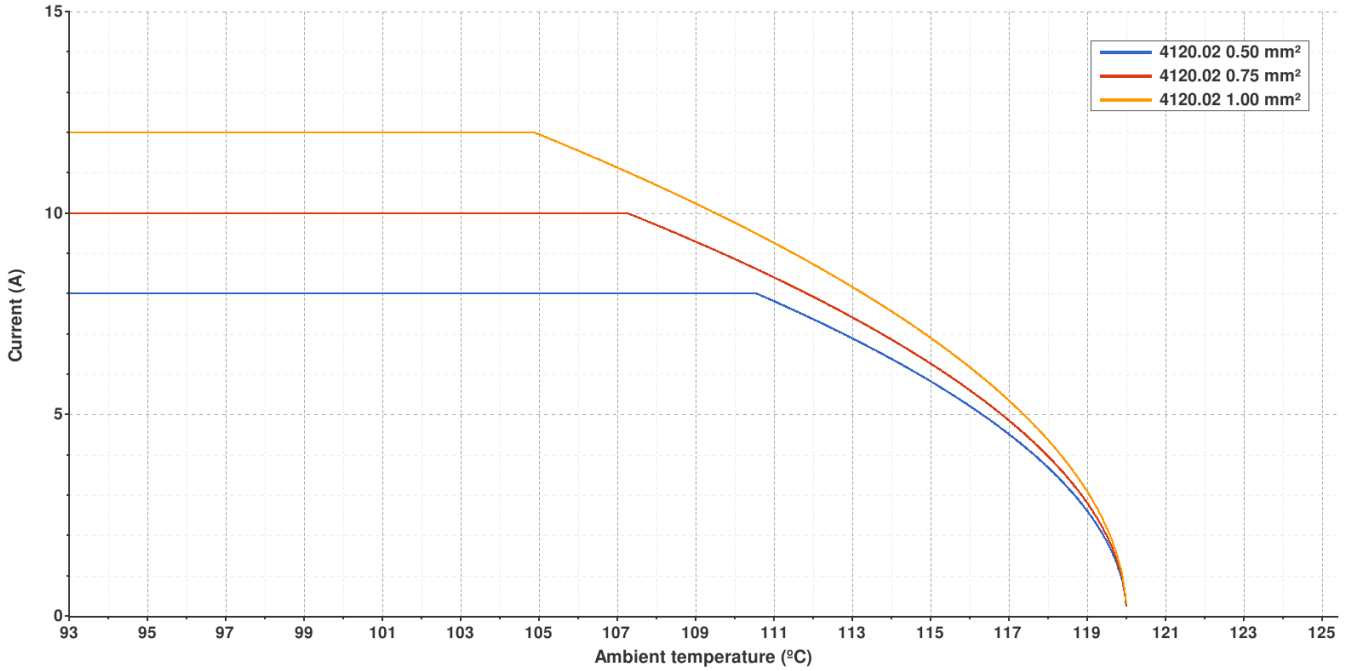
Valid for Natural Brass Tab

**4120.02 TIN PLATED BRASS**

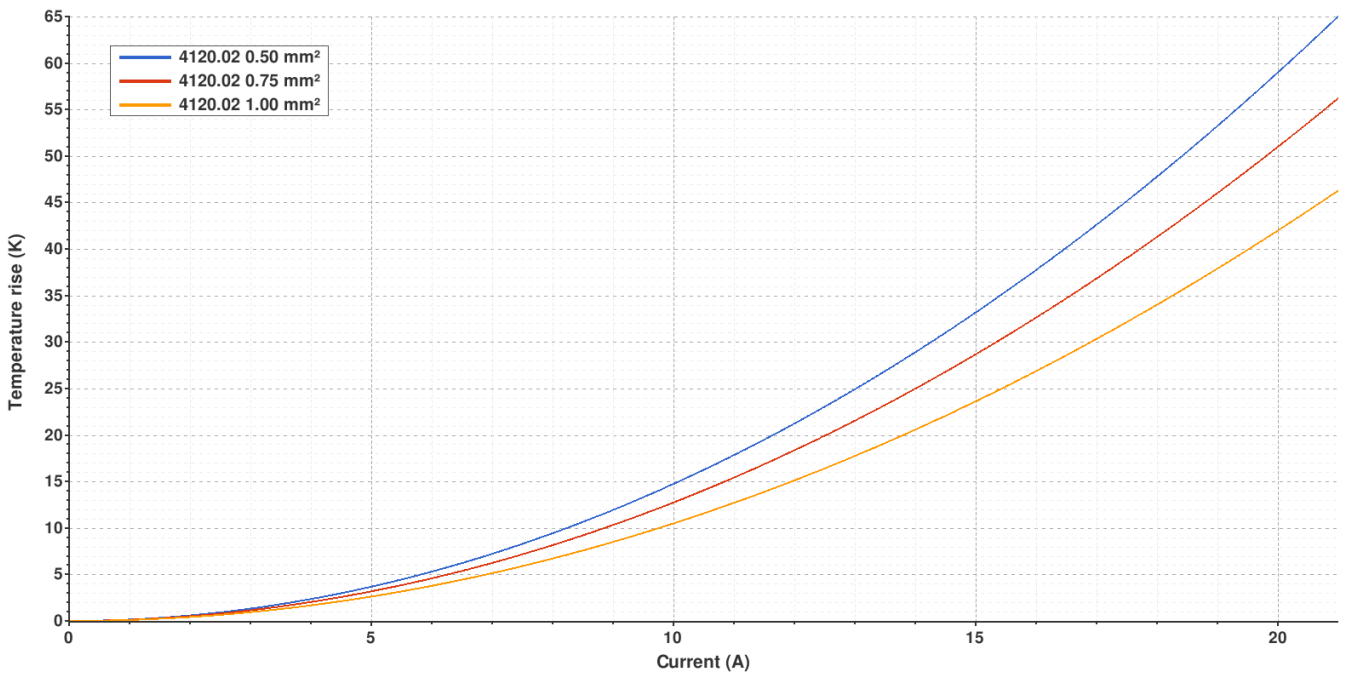
**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**



**Derating curve** Current carrying capacity vs. Ambient temperature



**Temperature rise curve** Terminal temperature rise due to the current carried



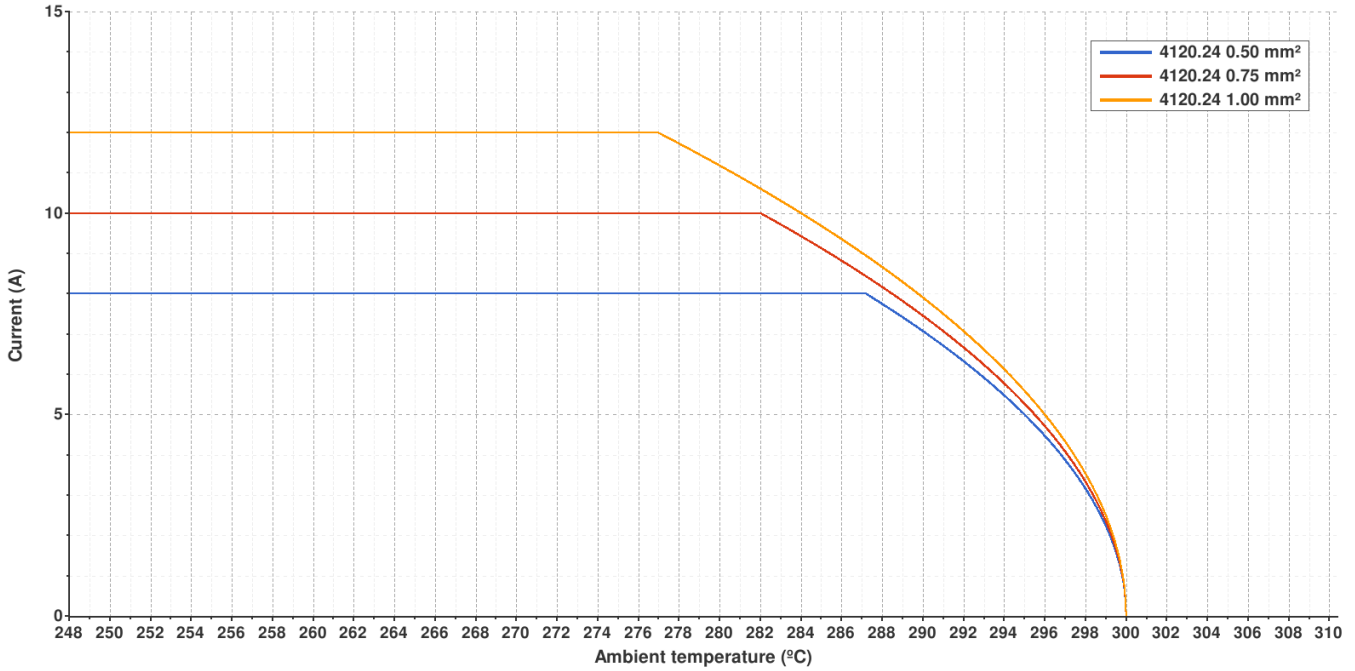
Valid for Natural Brass Tab

**4120.24 NICKEL-PLATED STEEL**

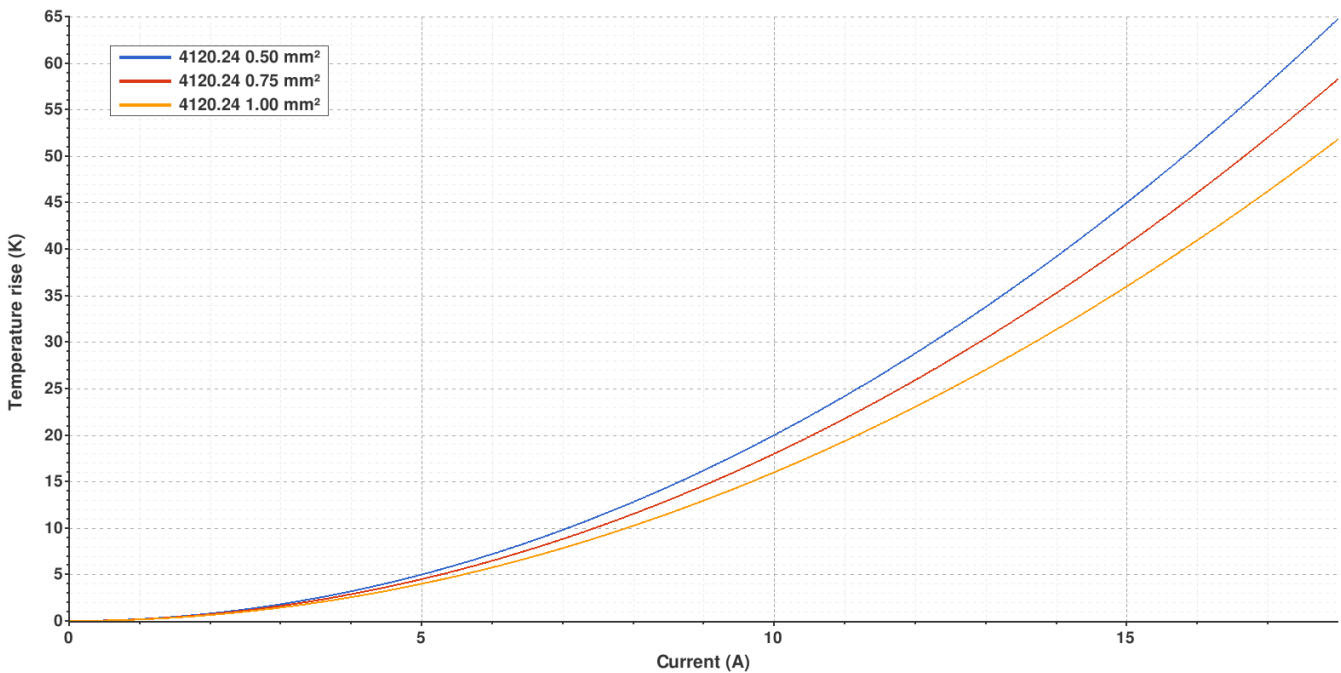


**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**

**Derating curve** Current carrying capacity vs. Ambient temperature



**Temperature rise curve** Terminal temperature rise due to the current carried



Valid for Natural Brass Tab

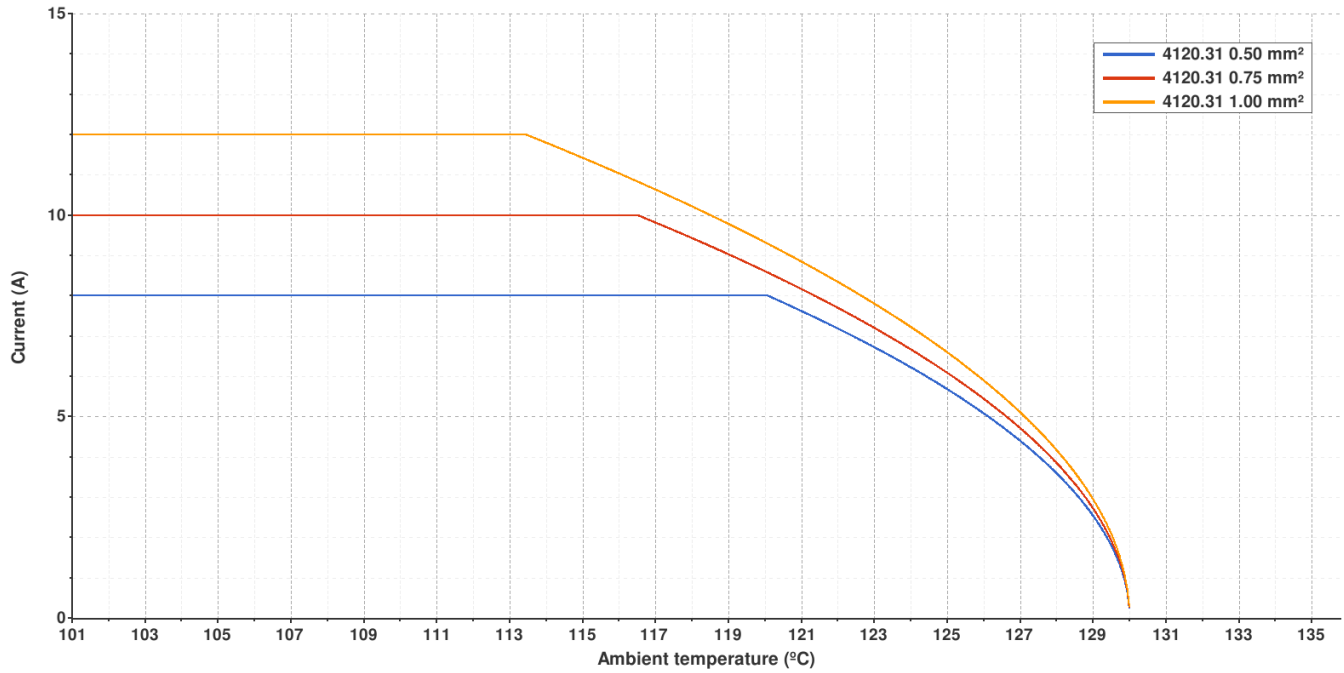
**4120.31 PRE-TIN-PLATED BRONZE**

**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**



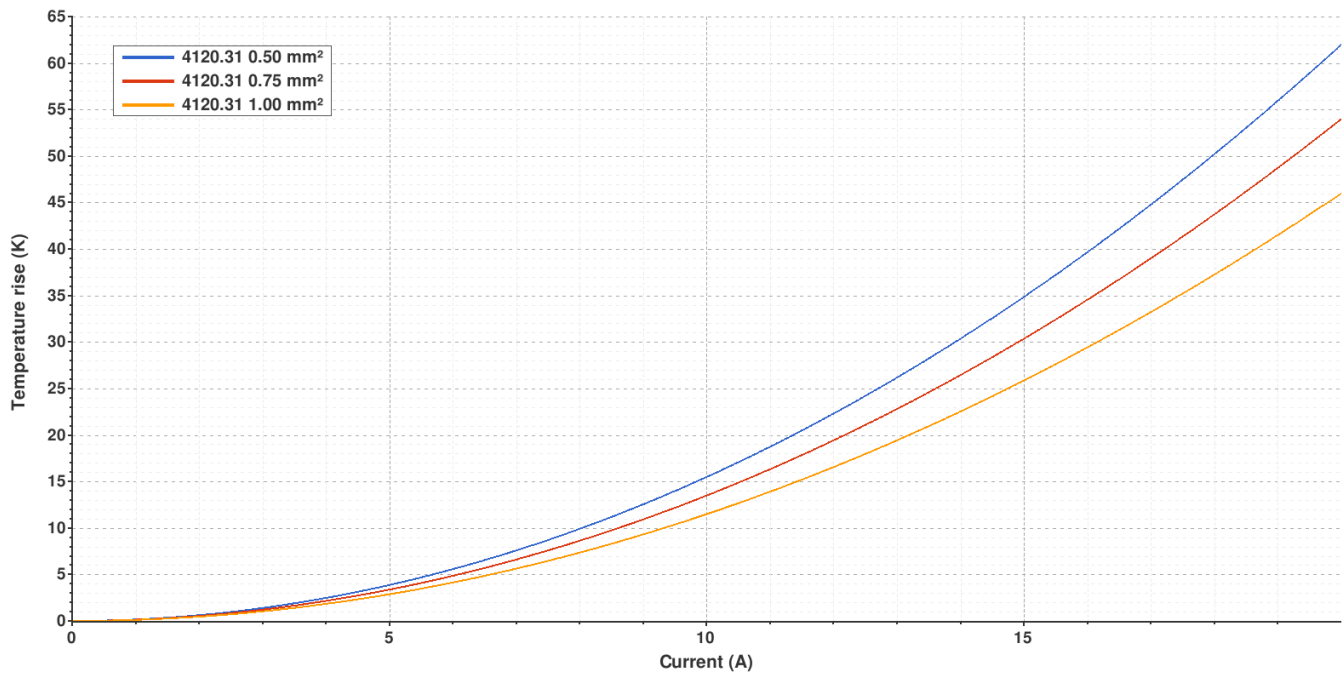
**Derating curve**

Current carrying capacity vs. Ambient temperature



**Temperature rise curve**

Terminal temperature rise due to the current carried



Valid for Natural Brass Tab

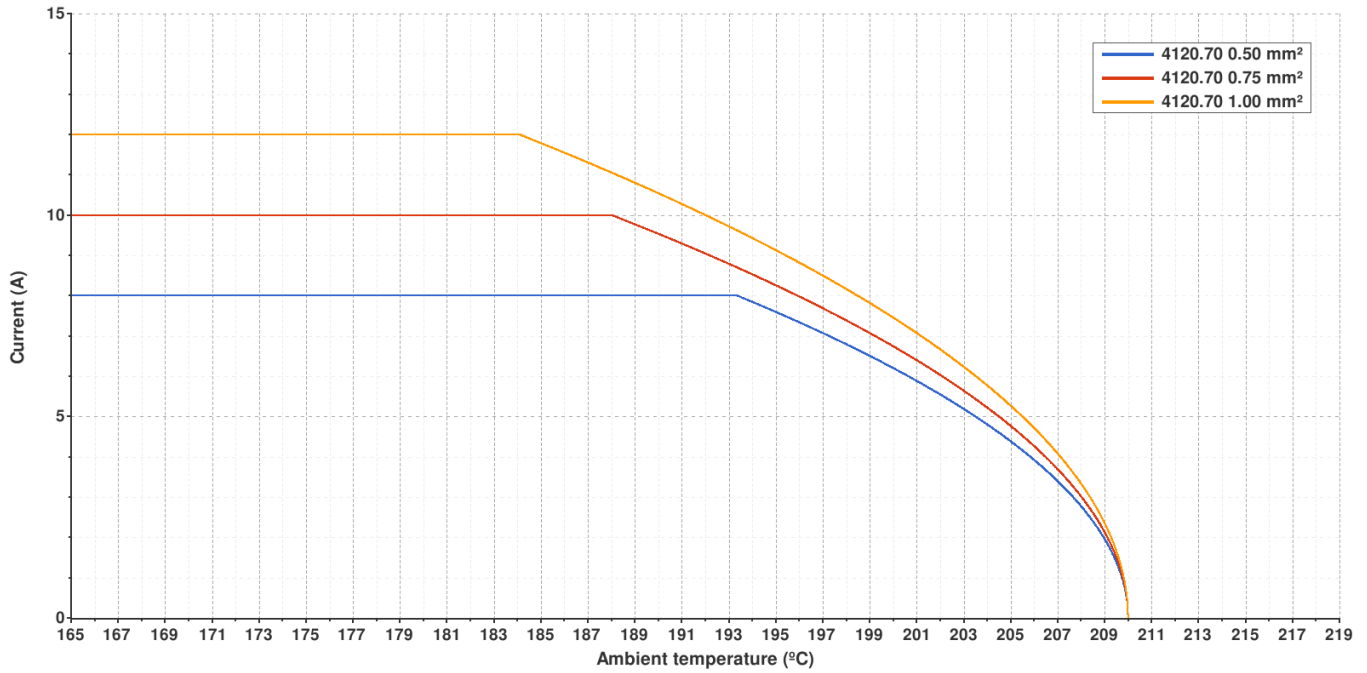
**4120.70 NATURAL GERMAN SILVER**



**RAST 5 TERMINALS AND CONNECTORS · RECEPTACLES FOR CONNECTOR**

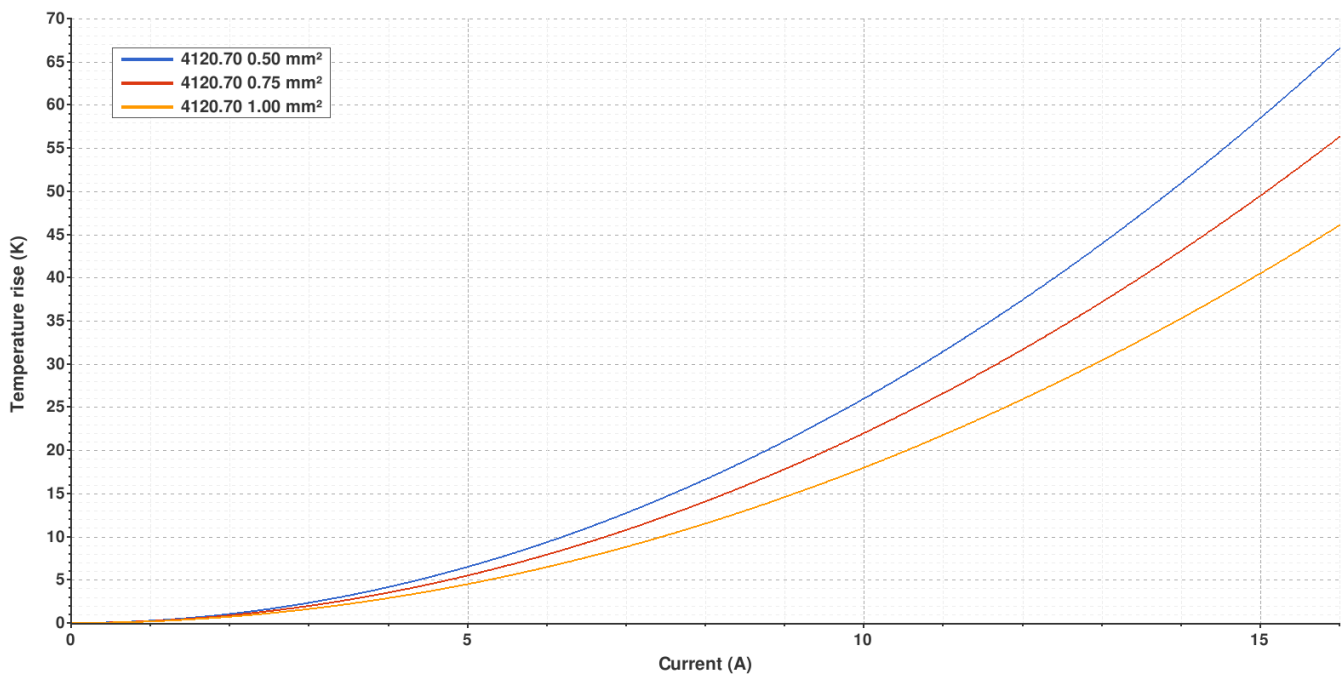
**Derating curve**

Current carrying capacity vs. Ambient temperature



**Temperature rise curve**

Terminal temperature rise due to the current carried



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(T.B.D.): To be determined

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Rev. Nr.	Concept	Date	Created/Revised	Approved
A3	Insertion and withdrawal forces - Update	2022-02-14	E. Roura (Laboratory Dept.)	O. Roura (Engineering Dept.)
A2	Change company name and logo	2021-10-21	Laboratory Dept.	E. Roura
A1	Datasheet generated automatically [A1]	2019-06-04	Laboratory Dept.	E. Roura

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