

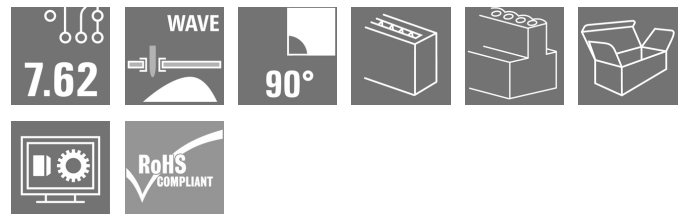
BLL 7.62HP/03/90 3.2SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

90° female header for the PCB with a pitch of 7.62.

Meets IEC 61800-5-1 requirements and enables UL approval as per UL840 600 V. Ideal touch-safe solution for the power output and intermediate circuit applications.

The mating profile guarantees touch safety of >3 mm as per IEC61800-5-1.

Variants: without flange, flange version, soldered flange version.

General ordering data

Version	PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	1043240000
Type	BLL 7.62HP/03/90 3.2SN BK BX
GTIN (EAN)	4032248774814
Qty.	84 pc(s).
Product data	IEC: 630 V / 24 A UL: 300 V / 20 A
Packaging	Box

Creation date June 14, 2025 5:48:44 PM CEST

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Technical data**Dimensions and weights**

Depth	24.5 mm	Depth (inches)	0.965 inch
Height	13.7 mm	Height (inches)	0.539 inch
Width	22.04 mm	Width (inches)	0.868 inch
Net weight	4.536 g		

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Board connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 "
Number of poles	3	L1 in mm	15.24 mm
L1 in inches	0.6 "	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	7 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	2...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	4...8 µm Sn hot-dip tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	24 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	24 A
Rated current, max. number of poles (Tu=40°C)	21 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	630 V	Rated voltage for surge voltage class / pollution degree III/3	400 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 180 A
Clearance, min.	7.2 mm	Creepage distance, min.	7.8 mm

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Technical data**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA)	300 V
Rated voltage (Use group D / CSA)	300 V
Rated current (Use group C / CSA)	20 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / CSA)	150 V
Rated current (Use group B / CSA)	20 A
Rated current (Use group D / CSA)	10 A

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group C / UL 1059)	20 A
Clearance distance, min.	7.2 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059)	150 V
Rated current (Use group B / UL 1059)	20 A
Rated current (Use group D / UL 1059)	10 A
Creepage distance, min.	7.8 mm

Packing

Packaging	Box	VPE length	349 mm
VPE width	137 mm	VPE height	31 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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Technical data**Important note**

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional variants on request • Gold-plated contact surfaces on request • Spacing between rows: see hole layout • Rated current related to rated cross-section & min. No. of poles. • P on drawing = pitch • Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL. INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

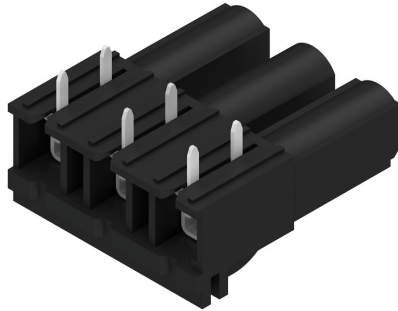
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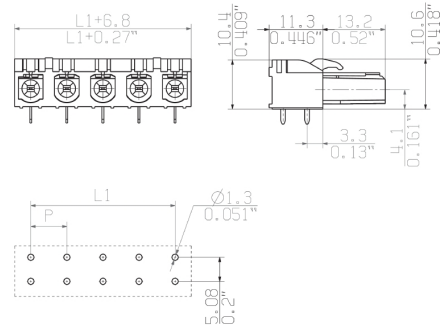
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Drawings

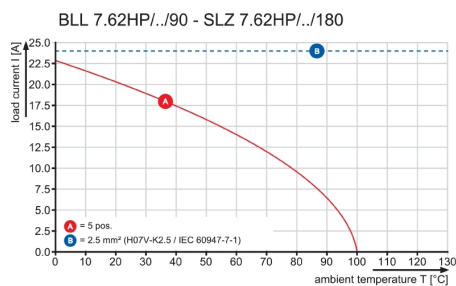
Product image



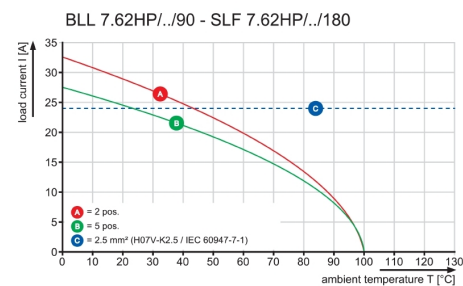
Dimensional drawing



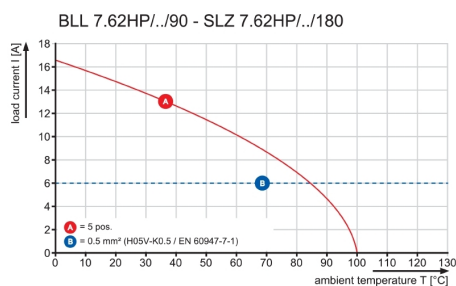
Graph



Graph



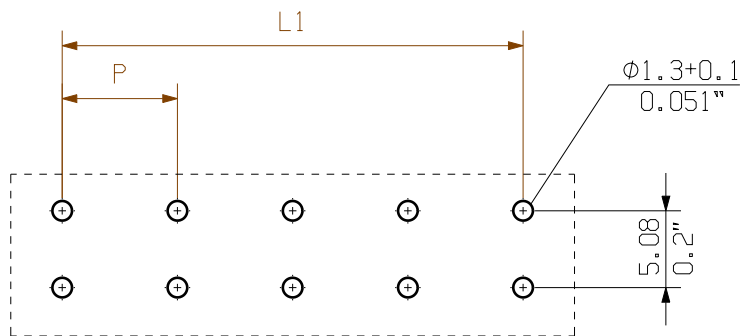
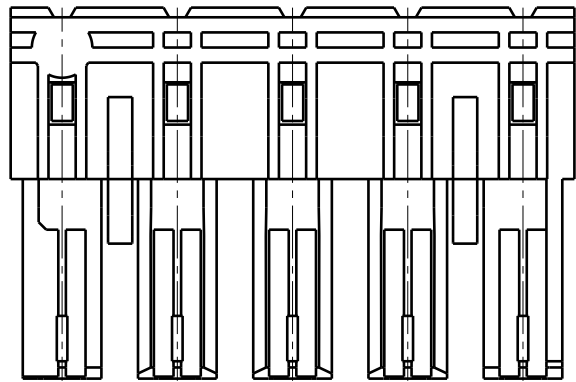
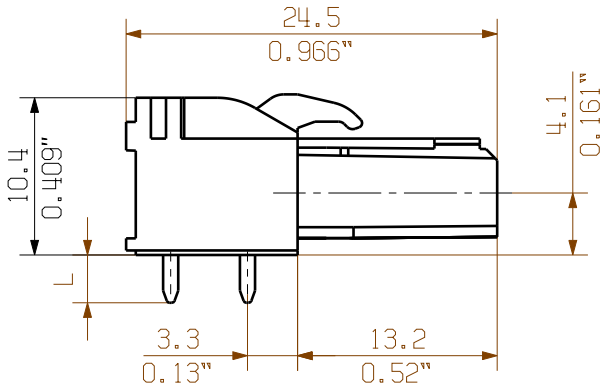
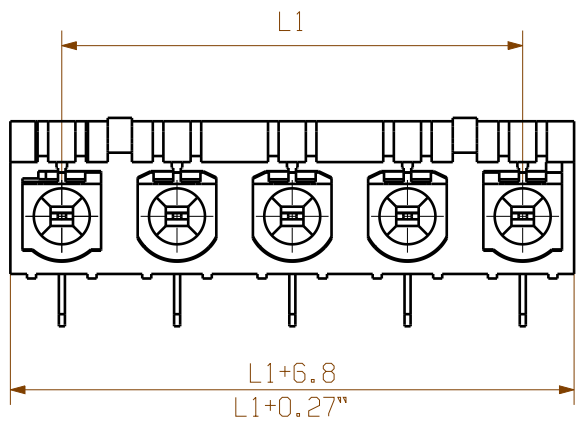
Graph



MASS E OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

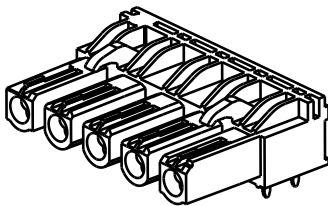
DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

BLL7.62HP/.../90

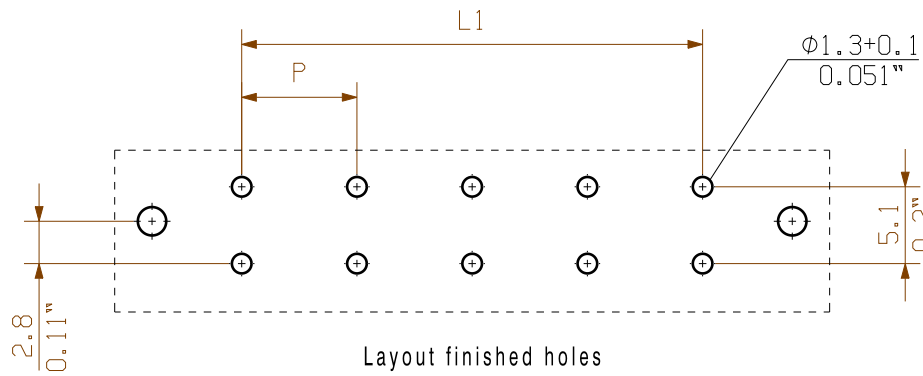
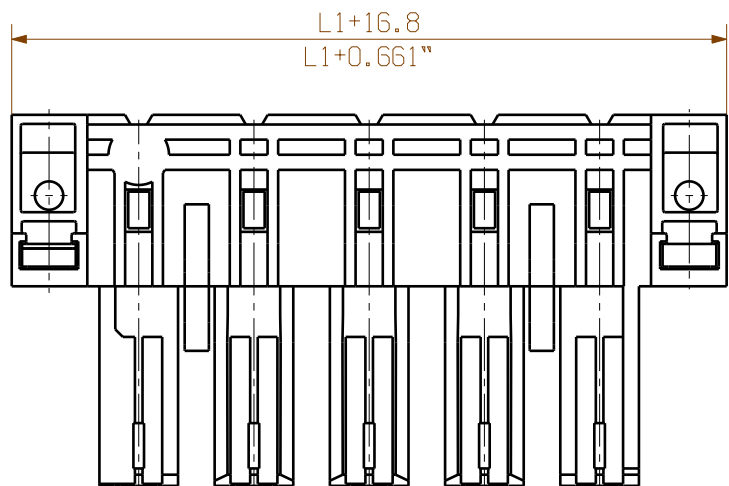
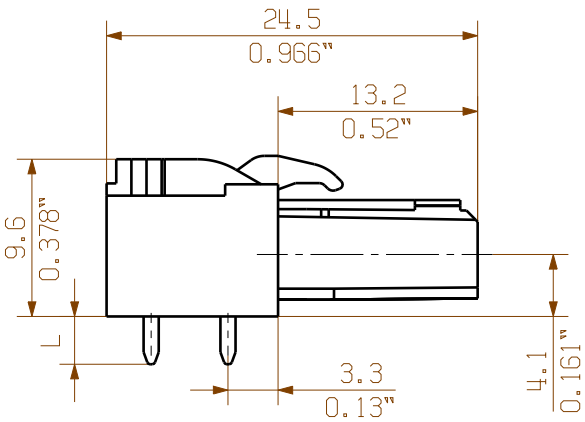
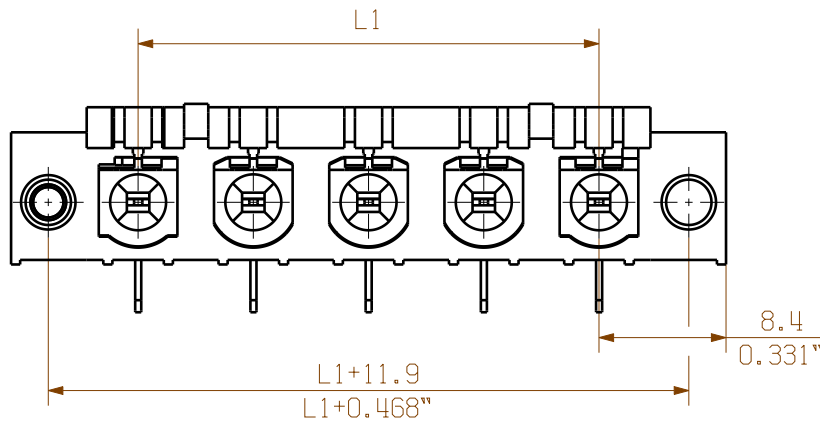


Layout finished holes

M 1/1

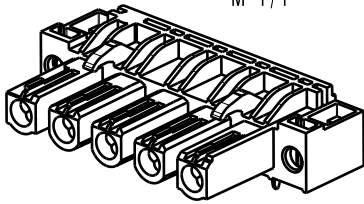


BLL7.62HP/.../90F

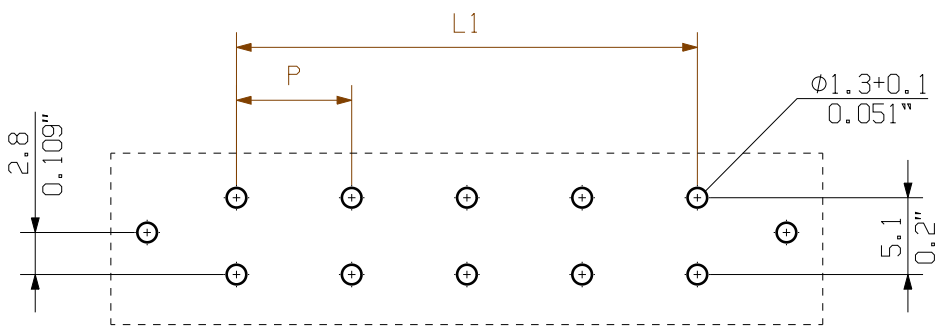
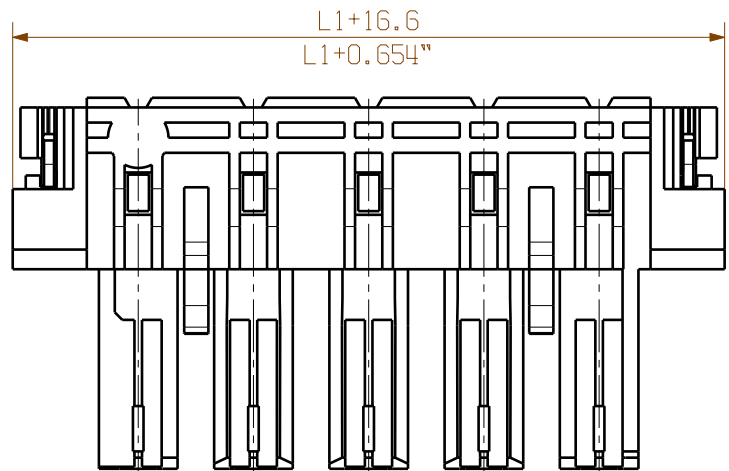
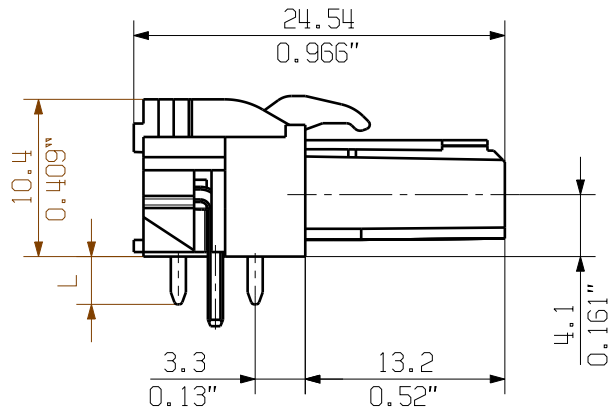
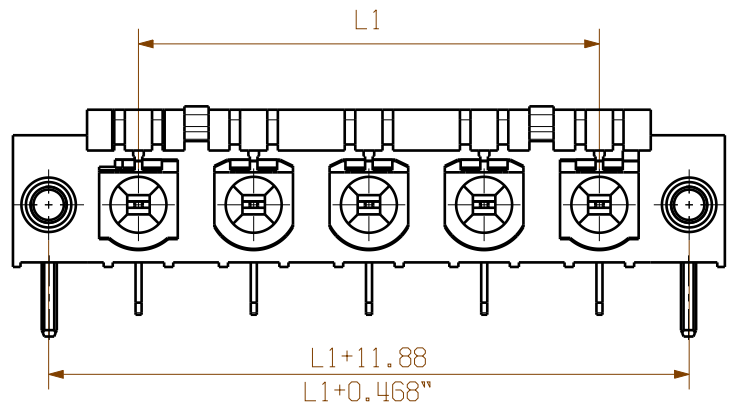


Layout finished holes

M 1/1

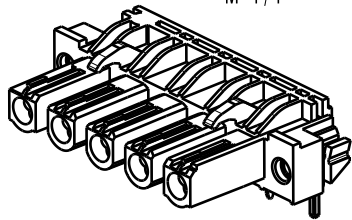


BLL7.62HP/.../90LF



Layout finished holes

M 1/1



For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application.
Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

n = POLZAHL / NO OF POLES
P = RASTER/ PITCH

	DIN ISO 2768-m		CAT.NO.: . . .	
	72010/5 12.09.13 HELIS_MA	00	Weidmüller	
	MODIFICATION		DATE	NAME
	DRAWN	17.09.2007	POCTA_C	
	RESPONSIBLE		STUCKMANN_P	
SCALE: 2/1	CHECKED	12.09.2013	HECKERT_M	
SUPERSEDES: .	APPROVED		HANKE_D	
PRODUCT FILE: BLL7.62HP			7373	

12	83.82	3.30
11	76.20	3.00
10	68.58	2.70
9	60.96	2.40
8	53.34	2.10
7	45.72	1.80
6	38.10	1.50
5	30.48	1.20
4	22.86	0.90
3	15.24	0.60
2	7.62	0.30
n	L1 (mm)	L1 (inch)

DRAWING NO. C 45003		ISSUE NO. 04
SHEET 02	OF 02	SHEETS

BLL7.62HP/.../90...
BUCHSENLEISTE
SOCKET BLOCK

Recommended wave soldering profiles

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Germany
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Fax: +49 5231 14-292083
www.weidmueller.com

Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.