

## ELECTRONIC SECTION

|  |  |
|--|--|
| Number of contacts   | 21, 24 + 7   |
| Contact spacing (mm)   |  |
| Male connector   | 2.54 x 5.08  |
| Female connector   | 5.08   |
| Working current  | 6 A max.   |
| see current carrying capacity chart  |  |
| Clearance  | ≥ 1.6 mm   |
| Creepage   | ≥ 3 mm   |
| Working voltage  |  |
| The working voltage also depends on the clearance and creepage dimensions on the pcb itself, and the associated wiring | according to the safety regulations of the equipment. Explanations see chapter 00  |
| Test voltage $U_{r.m.s.}$  | 1.55 kV  |
| Contact resistance   | ≤ 15 mΩ wrap, solder termination<br>≤ 20 mΩ including crimp connection   |
| Electrical termination   | Solder pins for pcb connection<br>Ø 1 ± 0.1 mm acc. to IEC 60326-3<br>Wrap posts 1 x 1 mm diagonal 1.34-1.45 mm<br>Crimp terminal 0.09-1.5 mm <sup>2</sup> |
| Contact surface  |  |
| Contact zone   | Selectively plated according to performance level <sup>1)</sup>  |

## HEAVY DUTY SECTION\*

|  |   |
|--|---|
| Number of contacts   | 7   |
| Working current  | 15 A max.   |
| see current carrying capacity chart  |   |
| Clearance  | ≥ 4.5 mm  |
| Creepage   | ≥ 8.0 mm  |
| Working voltage  |   |
| The working voltage also depends on the clearance and creepage dimensions on the pcb itself, and the associated wiring | according to the safety regulations of the equipment. Explanations see chapter 00   |
| Test voltage $U_{r.m.s.}$  | 3.1 kV  |
| Contact resistance   | ≤ 8 mΩ  |
| Electrical termination   | Connector for faston 6.3 x 2.5 (faston width x wire gauge) acc. to DIN 46245 and DIN 46247<br>Solder pins for pcb connection<br>Ø 1.6 ± 0.1 mm acc. to DIN EN 60097 |
| Contact surface  |   |
| Contact zone   | Hard silver plated  |

## BOTH PARTS

|  |   |
|--|---|
| Insulation resistance  | ≥ 10 <sup>12</sup> Ω for standard articles<br>≥ 10 <sup>11</sup> Ω for special NFF articles<br>(with part-no. ending 222) |
| Temperature range  | - 55 °C ... + 125 °C  |
| The higher temperature limit includes the local ambient and heating effects of the contacts under load |   |

Insertion and withdrawal force ≤ 85 N

## Materials

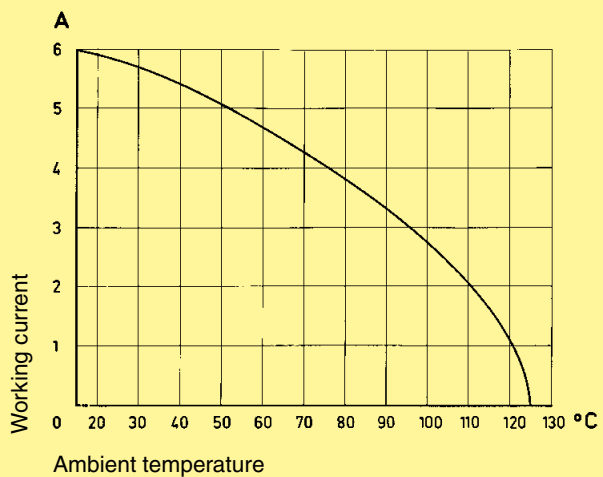
|           |   |
|-----------|---|
| Mouldings | Thermoplastic resin, glass-fibre filled, UL 94-V0 |
| Contacts  | Copper alloy                                      |

## Current carrying capacity

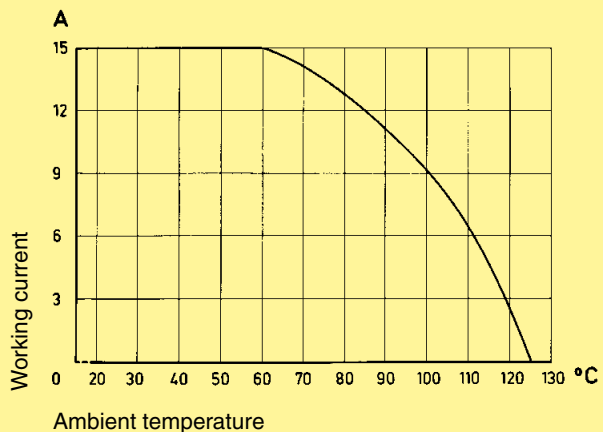
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512

### Electronic section



### Heavy duty section



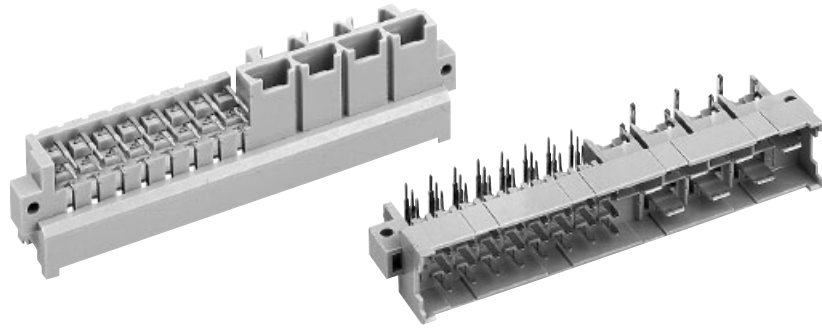
\* only for type MH 24 + 7

<sup>1)</sup> Explanation of performance levels see chapter 00

Mating conditions see chapter 00  
Coding systems see chapter 00

Number of contacts

**24 + 7**  
F + H

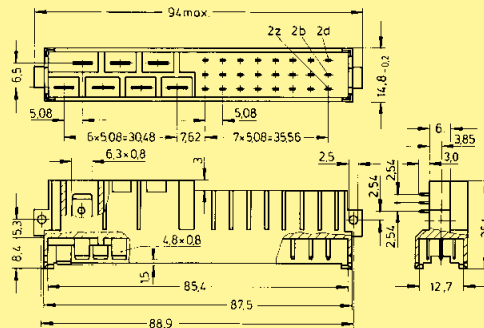


Male connectors

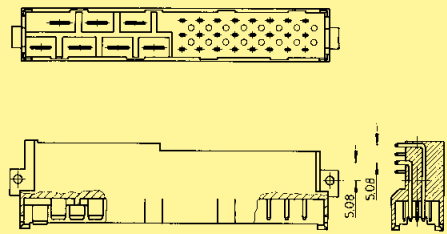
| Identification  | Number of contacts | Part No. Performance levels according to IEC 60 603-2. Explanation chapter 00 |  |                              |
|---|--------------------|---|--|------------------------------|
|   |                    | 3   | 2  | 1                            |
| Male connector for faston 6.3 x 2.5<br><br>1 leading contact (position z 32)<br><br>2 leading contacts (position z 2 + z 32)                  | 24 + 7             |   | 09 06 031 6921 <sup>1)</sup>                   | 09 06 031 2921 <sup>1)</sup> |
|   | 24 + 7             |   | 09 06 031 6923 <sup>1)</sup>                   |                              |
| Male connector with angled solder pins <sup>1)</sup><br><br>1 leading contact (position z 32)<br><br>2 leading contacts (position z 2 + z 32) | 24 + 7             |   | 09 06 131 6922                                 |                              |
|   | 24 + 7             |   | 09 06 131 6924<br>09 06 331 6924 <sup>b)</sup> |                              |

DIN Power up to 15 A

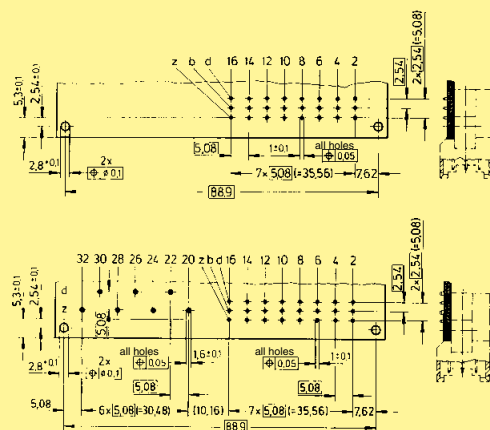
Faston terminal



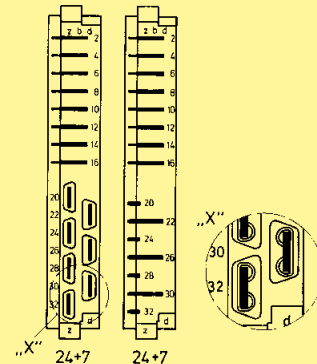
Angled solder pins



Board drillings  
Mounting side



Contact arrangement  
View from termination side



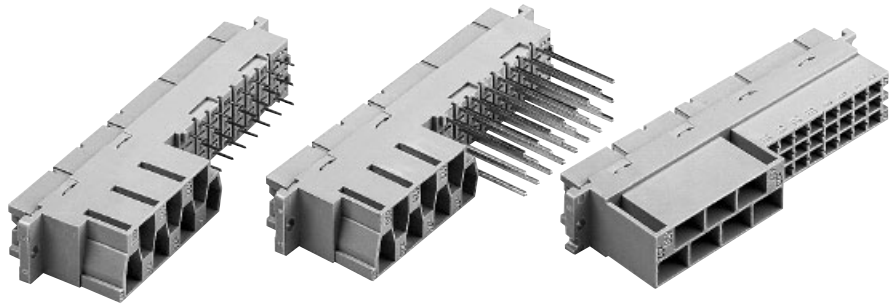
Dimensions in mm

<sup>1)</sup> With shroud coding, see chapter 00  
<sup>b)</sup> Connector with fixing clip see chapter 00  
<sup>1)</sup> Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2

Number of contacts

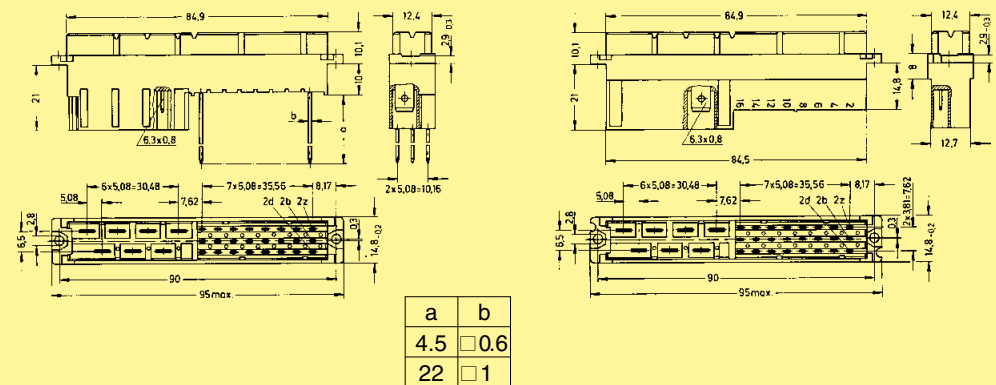
# 24 + 7

F + H

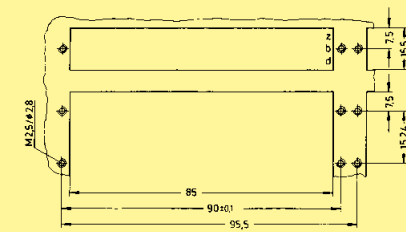


Female connectors

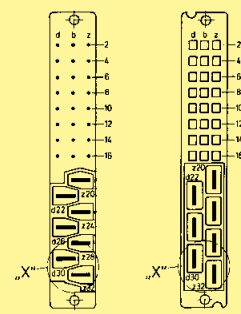
| Identification   | Number of contacts | Part No. Performance levels according to IEC 60 603-2. Explanation chapter 00 |  |  |
|--|--------------------|---|--|--|
|  |                    | 3   | 2  | 1  |
| Female connector with solder pins 4.5 mm <sup>1)</sup>   | 24 + 7             |   | 09 06 231 6822<br>09 06 231 6822 222 <sup>1)</sup> | 09 06 231 2822                                     |
| Female connector with wrap posts 1 x 1 mm <sup>1)</sup>  | 24 + 7             |   | 09 06 231 6821                                     | 09 06 231 2821<br>09 06 231 2821 222 <sup>1)</sup> |
| Female connector for crimp contacts <sup>1)</sup><br>Order contacts separately, see chapter 03 | 24 + 7             |   |  | 09 06 231 2881<br>09 06 231 2881 222 <sup>1)</sup> |



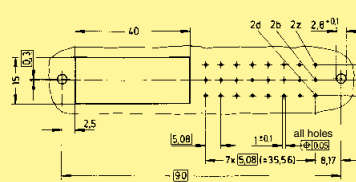
Panel cut out



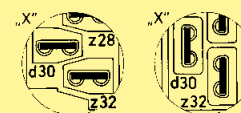
Contact arrangement  
View from termination side



Board drillings  
Mounting side



Shell housing for female connector with crimp contacts  
see chapter 20



Dimensions in mm

DIN Power  
up to 15 A

<sup>1)</sup> With shroud coding, see chapter 00

<sup>1)</sup> Railway classification NFF 16-101, Smoke index: F1, Flammability class: I2