

# PROTEMP 80 M



## FEATURES



Temperatures from  
-40°C to +70°C



Indoor, Outdoor &  
Offshore suitable  
Protection class IP67



Highest power den-  
sity with minimal  
device-footprint



Optimal for all  
common enclosure  
geometries

## DATA SHEET CONTENT

Number	Content	Page
1	Technical specifications	2
2	Variants and order codes	2
3	Connector assignment	3
4	Performance diagrams	3
5	Dimensions	4
6	Accessories	6
7	Certificates and notes	7

# PELTIER SURFACE COOLER

## Series PROTEMP

### PROTEMP 80 M | AP-80M-24-NN4-XXX-DNPT

## 1 TECHNICAL SPECIFICATION

### General data

Dimensions [HxWxD]	170 x 130 x 110 mm
Weight	approx. 2.2 kg
Material outer side (Warm-side)	1.4404-V4A grounded or aluminium in RAL7035 (V4A optionally powder coated in RAL7035)
Life expectancy	40.000 h (L10 lifespan at +60°C operational temperature)
Supply voltage	24 V
Input power	58 W
Noise emission	57 dB (measuring distance 1 m, maximum fan performance when used as intended with nominal voltage)
Max. input current	3.7 A
Rated current	2.4 A
Operating temperature range	-40 °C to +70 °C
Storage temperature range	-40 °C to +70 °C
Recommended pre-fuse	1x 4 A type B

### Cooling and tempering

Cooling capacity (L35 / L35)	80 W
Heating operation possible	yes
Heating capacity	approx. 120 W

### IP-protection and safety features

Protection class outer side (warm-side)	IP67
Protection class inner side (cold-side)	IP67 (connection cable excluded)
Temperature switch, warm-side	Bimetal switch NC, 250 V-AC 5A, 24V-DC 10A The alarm can be configured as safety shut-off or as fault message.
Switch-point temperature switch	+90°C

## 2 VARIANTS AND ORDER CODES

### PROTEMP 80 M | Surface cooler

Variant	Item No	Device-Code	Description
COMPACT - RAL	006495	AP-80M-24-NN4-OCR-DNPT	Small footprint for optimal integration
OUTDOOR - V4A	006496	AP-80M-24-NN4-OOV-DNPT	Robust V4A-outer hood
OUTDOOR - RAL	006497	AP-80M-24-NN4-OOR-DNPT	Robust outer hood powder-coated in RAL7035

# PELTIER SURFACE COOLER

Series PROTEMP

## PROTEMP 80 M | AP-80M-24-NN4-XXX-DNPT

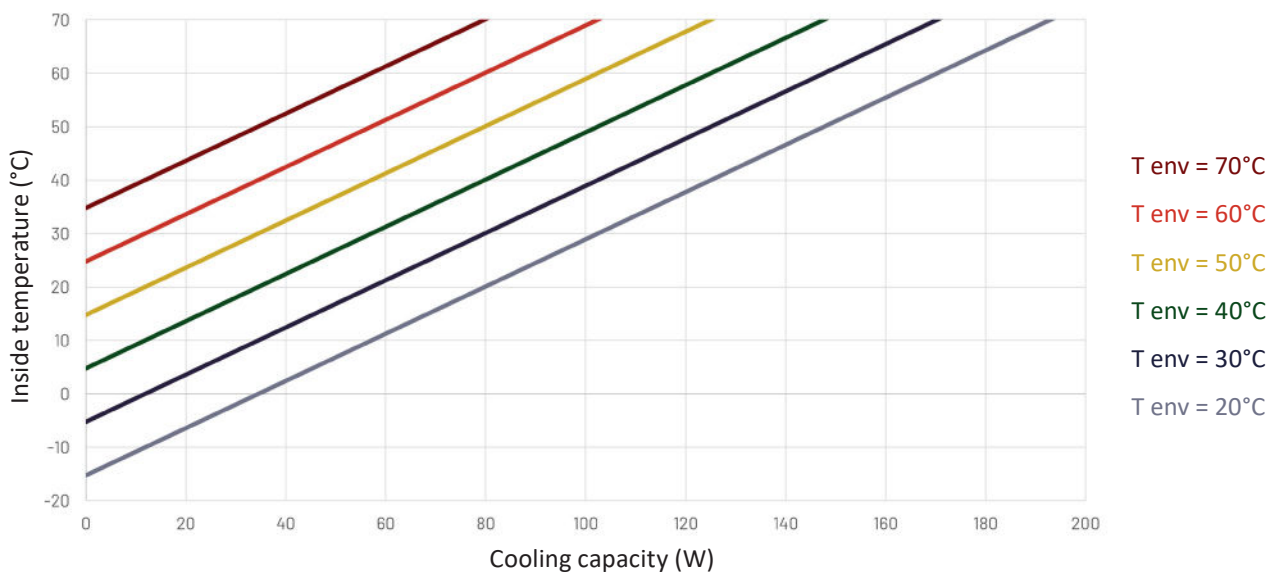
### 3 CONNECTOR ASSIGNMENT

#### OVERVIEW

Cable	Wire Colour / Number	Assignment
1	black / 1	(+) 24 V Peltier
1	black / 2	(-) 24 V Peltier
1	black / 3	Alarm / Thermostat
1	black / 4	Alarm / Thermostat
2	white / -	(+) 24 V Outer fans
2	brown / -	(-) 24 V Inner fans

Length of connection cable 0.5m divided as follows:  
 - 1x grey PVC cable with 2x0.25mm<sup>2</sup>  
 - 1x grey PVC cable with 4x0.50mm<sup>2</sup>

### 4 PERFORMANCE DIAGRAM



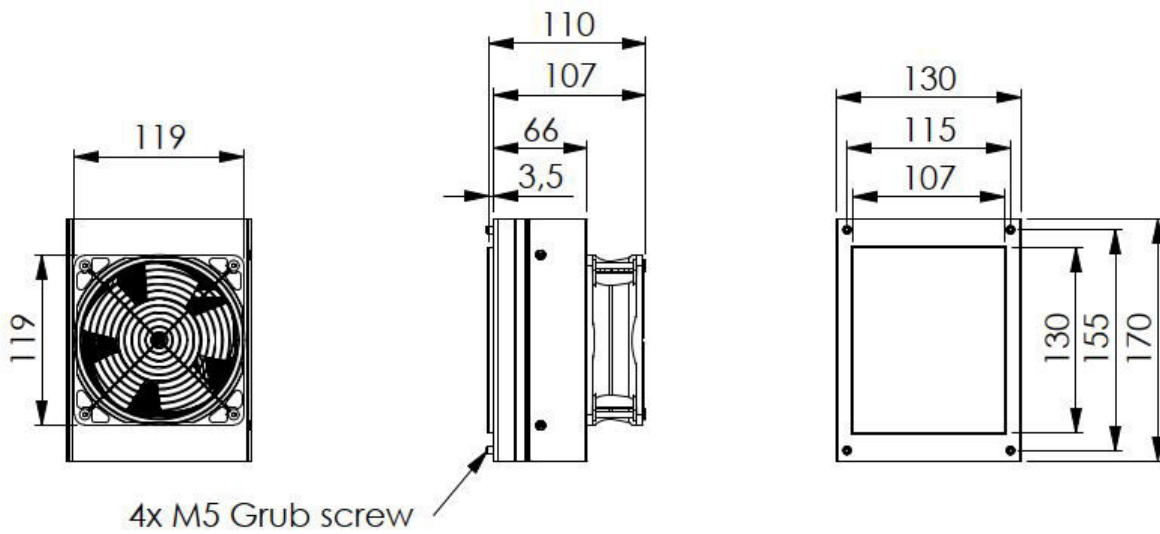
# PELTIER SURFACE COOLER

Series PROTEMP

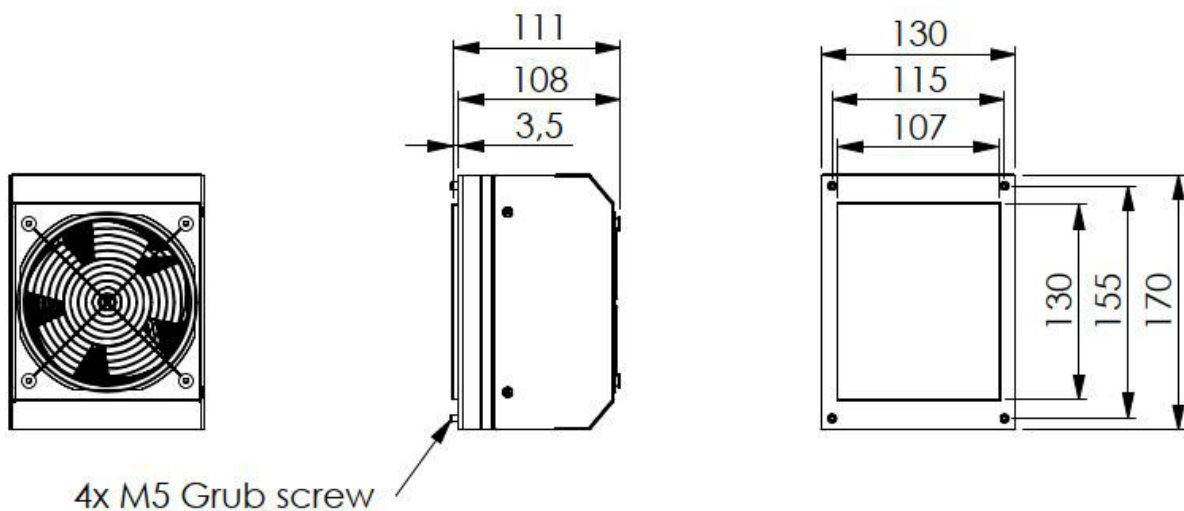
## PROTEMP 80 M | AP-80M-24-NN4-XXX-DNPT

### 5 DIMENSIONS

#### MAIN DIMENSIONS VARIANT COMPACT



#### MAIN DIMENSIONS VARIANTE OUTDOOR





# PELTIER SURFACE COOLER

## Series PROTEMP

### PROTEMP 80 M | AP-80M-24-NN4-XXX-DNPT

#### 6 ACCESSORIES



##### Power supply - 006046

DIN rail power supply NDR-75-24  
Manufacturer: MeanWell

Compact DIN rail power supply unit for a reliable power supply to the Peltier housing cooler



##### Power supply - 003936

Screw mount power supply HLG-80H-24  
Manufacturer: MeanWell

Sealed LED power supply unit with high IP protection, which is also suitable for outdoor installation.



##### Peltier control - 11

Compact Peltier controller SCC-003-A for top-hat rail mounting. Enables heating and cooling operation of the devices via an integrated H-bridge.



##### Thermostat - 004815

Compact top-hat rail thermostat for simple control of the Peltier cooler for use in cooling mode.

# PELTIER SURFACE COOLER

## Series PROTEMP

### PROTEMP 80 M | AP-80M-24-NN4-XXX-DNPT

#### 7 CERTIFICATES AND NOTES

##### CERTIFICATES



##### NOTES

For the product „DR.NEUMANN Peltier-switch cabinet cooler PROTEMP 55 M“ the CE label is issued on the basis of the Directive 2014/30/EU of the Council of the European Community of 26 February 2014 on the approximation of the laws of the Member States relating to communication equipment, including the mutual recognition of their conformity.

The product „DR.NEUMANN Peltier-switch cabinet cooler PROTEMP 55 M“ as described here meets the requirements for CE labeling:

**Interference immunity according to EN 50082-2**

Electromagnetic compatibility generic standards interference immunity

**Radio interference suppression according to EN 55022 Class A**

Electromagnetic compatibility of information processing and telecommunications equipment

**Electrical safety according to EN 60950**

Safety of information technology equipment including electrical office machines

This device is intended for use in industrial environments. The interference immunity and interference emission comply with the guidelines for industrial equipment. When used in residential and business areas, interference with other devices (e.g. radio) may occur under certain circumstances. The operator must independently ensure that no third party is affected by possible interference.

This declaration is made responsibly for the manufacturer

**DR. NEUMANN Peltier-Technik GmbH**

Gautinger Straße 45

82061 Neuried, DE