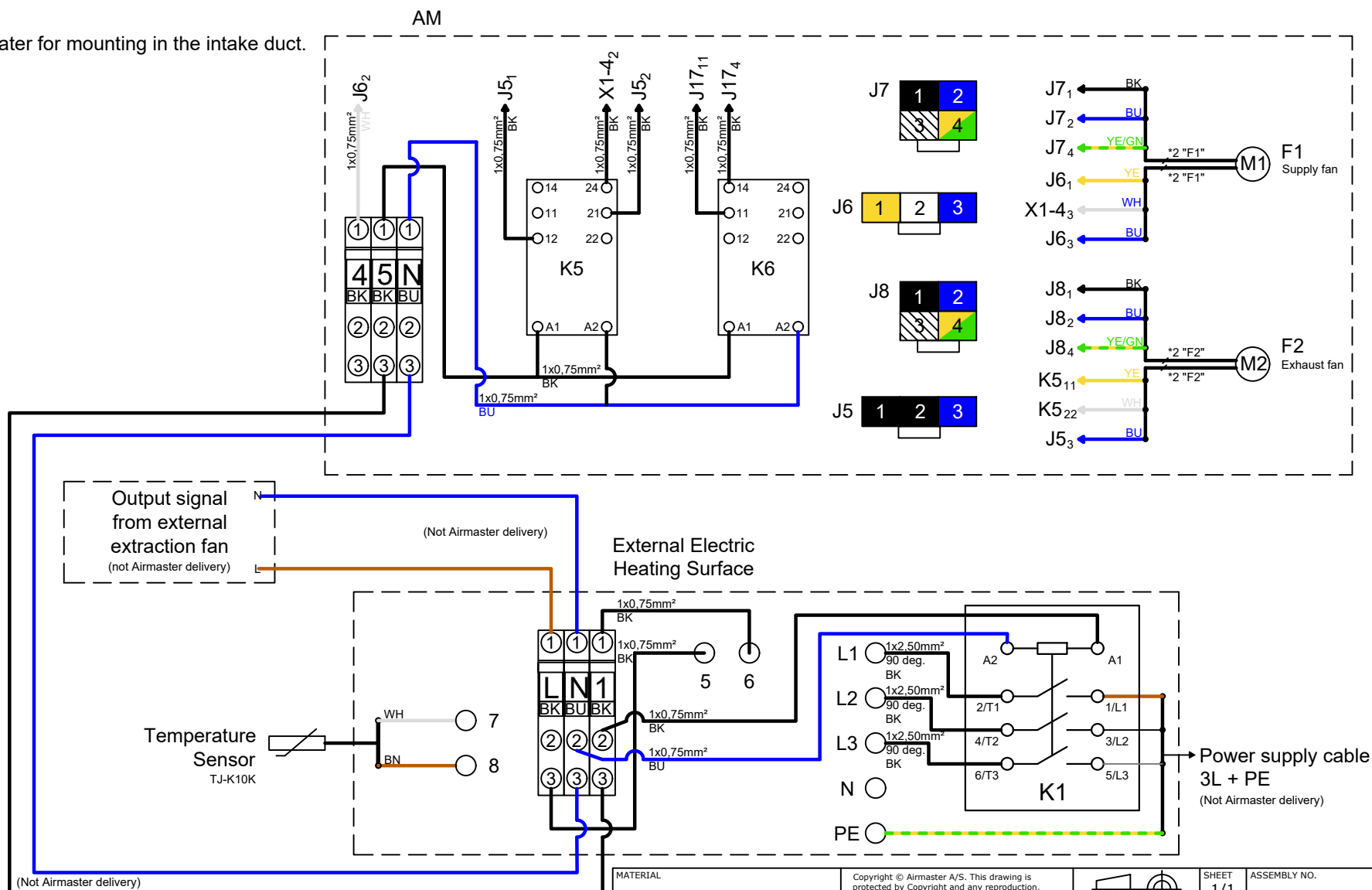


N.B.:

External electric duct heater for mounting in the intake duct.



Colour codes
(IEC60757)

BK	Black
BN	Brown
BU	Blue
GN	Green
GY	Grey
OR	Orange
RD	Red
VT	Violet
WH	White
YE	Yellow

K1	Contacteur CI 12, 3P 400V
K5	Relay, RM84-2312-35-5230
K6	Relay, RM84-2312-35-5230

MATERIAL		Copyright © Airmaster A/S. This drawing is protected by Copyright and any reproduction, distribution or use of the drawing or parts of it without prior written consent will be prosecuted.		SHEET 1/1	ASSEMBLY NO.
SURFACE TREATMENT		AIRMMASTER		FORMAT A4	PRODUCT SERIES
APPROVED BY Michael F. Kokholm		DATE 2026-05-13		TITLE Wiring diagram for external electric duct heater, AQC-L	
DRAWN BY Lasse L. Kilde		DATE 2026-05-13		DRAWING NO. 16591	REVISION 00

Supplementary notes to wiring diagram 16591

Description

A 230 V signal from an external extraction fan (not supplied by Airmaster) will switch the air handling unit's operating mode to "Boost Mode", increase the supply airflow rate to a high level, stop the extraction fan, and allow activation of the electric duct heater to heat the inlet air to a comfortable level.

Installation

The electric duct heater and temperature sensor must be mounted in accordance with the heater's manual. Particular attention must be paid to the requirements regarding the orientation of the duct heater, the airflow direction, and the required clearance distances.

The electrical installation of the duct heater and the signal from the external extraction fan (not supplied by Airmaster) must be carried out in accordance with the attached wiring diagram.

Factory Settings

The following special settings are pre-programmed from the factory to prepare the unit for receiving a boost signal:

- Operation - Boost - Allow Boost = Yes (ID 359)
- I/O Config - Analog Inputs - AI 3 = Boost (ID 292)

Commissioning

In addition to the standard commissioning procedure described in the unit's manual, it is important to set the control voltage for the supply fan to achieve the required airflow in "Boost Mode". The required airflow will typically correspond to the unit's nominal maximum airflow, but the level must be adjusted during commissioning to balance the extraction airflow from the external extraction fan (not supplied by Airmaster).

- Adjust the temperature setpoint on the potentiometer knob located on the electric duct heater cover to the desired level during "Boost Mode", typically 19 °C.
- Connect a PC with Airlinq Service Tool to unit's controller.
- Check that "Started By" changes to "Boost" in the status window when the external extraction fan is activated.
- Measure the supply airflow when the unit is in "Boost".
Compare the measured airflow with the project requirements once the airflow has stabilised.
 - If the measured airflow is too low:
Open the settings window, navigate to "Operation" and then "Boost", and increase the value of "Boost Max Volt In".
Return to the status window and wait for the airflow to stabilise.
 - If the measured airflow is too high:
Open the settings window, navigate to "Operation" and then "Boost", and reduce the value of "Boost Max Volt In".
Return to the status window and wait for the airflow to stabilise.
- When the unit is delivering the desired supply airflow, verify that "Boost" is deactivated when the external extraction fan switched off.