# **Technical introduction**

The introductory pages preceeding the various product groups and the product pages contain specific instructions for and technical information on the relevant products. The following general information applies to the entire range of products.

## DQS certificate:

The high quality standards in R & D, production and sales are monitored by a quality management system that complies with the tough requirements of DIN EN ISO 9001. ebmpapst Landshut has been certified by DQS since 1991.

### Electromagnetic compatibility (EMC):

ebm-papst products are components supplied to other industrial and trade companies with expert knowledge of electromagnetic compatibility.

ebm-papst products are therefore not subject to the Law on Electromagnetic Compatibility of Equipment. Compliance with the EMC Directive must be assessed on the final product since different EMC properties may be created when products interact with other components.

ebm-papst AC motors meet the requirements of Low Voltage Directive and EMC Directive. Statutory limit values are being kept.

ebm-papst motors are not safety-relevant components requiring an EMC test by an independent institute. ebm-papst, therefore, does not issue EMC test protocols.

For squirrel-cage induction motors and their connection to mains voltages the "GUIDELINES IN THE APPLICATION OF COUNCIL DIRECTIVE 89/336/EEC OF 3 MAY 1989 ON THE APPROXIMATION OF THE LAWS OF THE MEMBER STATES RELATING TO EMC" apply.

Section 5.4, p.21ff states that compliance with the EMC regulations is generally assumed for induction motors (e.g. shaded pole motors and capacitor motors).

### Product liability:

ebm-papst motors and blowers are components the function of which is determined in the custo-mer's unit. ebm-papst offers a warranty for the function of its products according to EN 60335-1, EN 50178 and EN 60950, provided that the ebm-papst products are used correctly and that, during the development of the customer's product, ebm-papst made sure of this and issued a confirmation in writing as to this effect.

Only after the product has passed productspecific and application-specific tests agreed on between ebm-papst and the customer, can subsequent liability be assumed; this will be done exclusively in accordance with relevant statutory regulations.

**Important Information:** Fans and motors may only be used after installation and may not be put into operation before being properly installed. Installation has to be effected by trained, briefed and qualified staff.

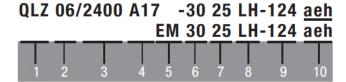
The information and images in this catalogue are non-binding. We reserve the right to modify our products (deviation from images and technical data provided herein) without prior notice in writing.

# Type code, glossary

#### Glossary

symbol	term	unit
V	air flow	m³/h, l/sec
ΔP <sub>fa</sub>	pressure difference at free air flow	Pa (Pascal)
$\Delta \mathbf{P}_{\mathrm{st}}$	static pressure difference	Pa
	former units	1 mmWS $\simeq$ 10 Pa 1 mbar $\simeq$ 100 Pa
n	speed formerly	min⁻¹, 1/min U/min, Upm
U	voltage	V (Volt)
f	frequency	Hz (Hertz)
P <sub>1</sub>	power input	W (Watt)
P <sub>2</sub>	power output	W (Watt)
I <sub>N</sub>	nominal current draw	mA (Milliampere)
М	tourque former unit	Ncm, Nm, mNm 1 kpm ≃10 Nm

# Structure of type code



### Blower design/series

QLx = tangential blower
RLx = radial blower AC
...x = blower series
RG = radial blower EC
AL = axial blower
RR = hot air blower

- 2 Diameter of impeller cm/mm
- **3** Width of impeller, side of motor mounting

XX00 = motor right 00XX = motor left

 $\mathbf{XX} = \text{width of impeller cm/mm}$ 

- Code for mechanical design of the blower
- Type of motor

EM = shaded pole motor

KM = capacitor motor

BG = DC motor

**6** Motor series

z.B. 20, 21, 22, 25, 30, 36, 43

- Stack size mm
- 8 L = longlife bearing bracket
   LH = high temperature version
   LN = low temperature version
   B = brake
- Code for mechanical design of the motor
- Code for electrical design of the motor