

# Type code

## 3-digit DC axial fan e.g. 412 FM

### Housing dimensions (W x H x D)

Value	Edge dim. (W x H)	Installation depth (D)
2	25 x 25 mm	8 mm
<b>4</b>	<b>40 x 40 mm</b>	<b>10 / 20 / 25 / 28 mm</b>
5	50 x 50 mm	15 mm
6	60 x 60 mm	15 / 25 / 32 mm
7	70 x 70 mm	15 mm

### Operating voltage

Value	Nominal voltage
<b>2</b>	<b>12 V</b>
4	24 V
5	5 V
8	48 V

**4 1 2 F M**

### Motor and housing version

Value	Version
<b>1</b>	<b>4xx fan, 10 / 20 / 25 / 28 mm (D)</b>
1	6xx fan, 15 / 25 / 32 mm (D)
2	25 / 28 mm (D)
3	63x fan, 25 mm (D)
5	2xx fan, 8 mm (D)

### Options (various versions possible)

A	Analog speed control input (input voltage: 0...5 / 0...10 V DC)
D	Reinforced flange corners with through-holes (series 44xx F) Constant speed control regardless of operating voltage
E	Economy fan with round flange
<b>F</b>	<b>Flat construction / frequency-modulated signal</b>
G	Sleeve bearing
H	High speed
HH	Further increased speed
H3-H8	Additional further increased speeds (H8 - maximum fan speed)
I	Integrated temperature sensor (NTC behavior, i.e. thermistor)
J	Jet characteristic / rigid curve
L	Low speed
<b>M</b>	<b>Medium speed</b>
ML	Between low and medium speed
N	Standard or basic speed (only DC fans)
O	Multi-option speed control input (analog or PWM signal)
P	PWM speed control input (pulse-width modulated signal)
R	Moisture protection coating
S	Circuit board and winding (IP 20), optional stainless steel ball bearing
T	Speed signal (additional wires for hall signal, obsolete technology)
TD	Turbo drive (extremely powerful 3-phase motor)
U	Environmentally friendly fan (min. IP 54)
V / VP	VARIOFAN
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number

## 4-digit DC axial fan, e.g. 4312 GM

### Housing dimensions (W x H x D)

Value	Edge dimensions (W x H)	Installation depth (D)
2	Ø 220 x 200 mm	51 mm
3	92 x 92 mm	25 / 32 / 38 mm
<b>4</b>	<b>119 x 119 mm</b>	<b>25 / 32 / 38 mm</b>
5	127 x 127 mm	38 mm
5	135 x 135 mm	38 mm
5	140 x 140 mm	51 mm
6	Ø 172 mm	51 mm
6	Ø 172 x 150 / 160 mm	51 mm
7	Ø 150 mm	38 / 55 mm
8	80 x 80 mm	25 / 32 / 38 mm

### Connection type and direction of rotation

Value	Connection type	Direction of rotation
<b>1</b>	<b>Wires, length = 310 mm</b>	
5	Wires, length = 310 mm	
6	Plug, 2.8 x 0.8 mm	Counterclockwise (CCW)
7	Plug, 2.8 x 0.8 mm	Clockwise (CW)
8	Plug, 2.8 x 0.5 mm	Counterclockwise (CCW)
9	Plug, 2.8 x 0.5 mm	Clockwise (CW)

**4 3 1 2 G M**

### Motor and housing version

Value	Version
1	38 mm (D)
2	38 mm (D)
<b>3</b>	<b>32 mm (D)</b>
4	25 / 38 / 51 mm (D)

### Operating voltage

Value	Nominal voltage
<b>2</b>	<b>12 V</b>
4	24 V
6	36 V
8	48 V

### Options (various versions possible)

A	Analog speed control input (input voltage: 0...5 / 0...10 V DC)
D	Reinforced flange corners with through-holes (series 44xx F) Constant speed control regardless of operating voltage
DV	Diagonal Venturi fan
E	Economy fan with round flange
F	Flat construction / frequency-modulated signal
<b>G</b>	<b>Sleeve bearing</b>
H	High speed
HH	Further increased speed
H3-H8	Additional further increased speeds (H8 - maximum fan speed)
I	Integrated temperature sensor (NTC behavior, i.e. thermistor)
J	Jet characteristic / rigid curve
L	Low speed
<b>M</b>	<b>Medium speed</b>
ML	Between low and medium speed
N	Standard or basic speed (only DC fans)
O	Multi-option speed control input (analog or PWM signal)
P	PWM speed control input (pulse-width modulated signal)
R	Moisture protection coating
S	Circuit board and winding (IP 20), optional stainless steel ball bearing
T	Speed signal (additional wires for hall signal, obsolete technology)
TD	Turbo drive (extremely powerful 3-phase motor)
U	Environmentally friendly fan (min. IP 54)
V / VP	VARIOFAN
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number

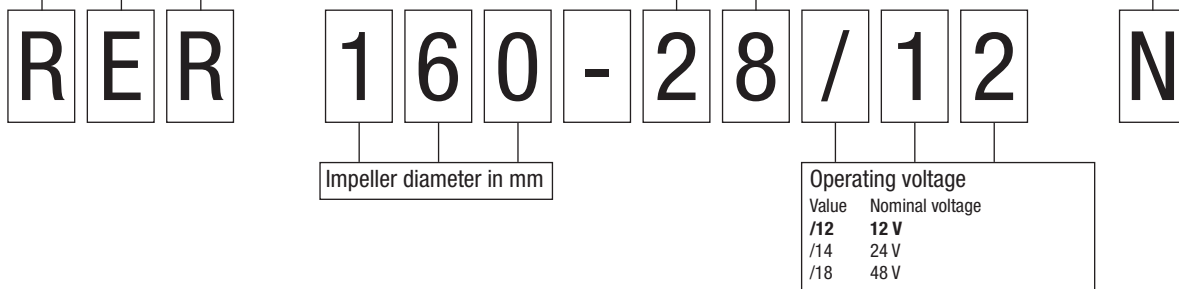
# Type code

## DC centrifugal fan e.g. RER 160-28/12 N

Type	Housing and fan impeller versions
	Housing Impeller blade design
RE	None Non-curved, no direction of rotation set
REF	None Forward/backward-curved impeller blades, flat
<b>RER</b>	<b>None Backward-curved impeller blades</b>
RET	None Forward-curved impeller blades
RG	Square Forward/backward-curved impeller blades
RL	Round Forward-curved impeller blades
RLF	Round Forward/backward-curved impeller blades, flat
RV	Round Forward-curved impeller blades

Options (various versions possible)	
A	Analog speed control input (input voltage: 0...5 / 0...10 V DC)
D	Reinforced flange corners with through-holes (series 44xx F) Constant speed control regardless of operating voltage
E	Economy fan with round flange
F	Flat construction / frequency-modulated signal
G	Sleeve bearing
H	High speed
HH	Further increased speed
H3-H8	Additional further increased speeds (H8 - maximum fan speed)
I	Integrated temperature sensor (NTC behavior, i.e. thermistor)
J	Jet characteristic / rigid curve
L	Low speed
M	Medium speed
ML	Between low and medium speed
<b>N</b>	<b>Standard or basic speed (only DC fans)</b>
O	Multi-option speed control input (analog or PWM signal)
P	PWM speed control input (pulse-width modulated signal)
R	Moisture protection coating Circuit board and winding (IP 20), optional stainless steel ball bearing
S	Speed signal (additional wires for hall signal, obsolete technology)
T	External temperature sensor (NTC behavior, i.e. thermistor)
TD	Turbo drive (extremely powerful 3-phase motor)
U	Environmentally friendly fan (min. IP 54)
V / VP	VARIOFAN
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number

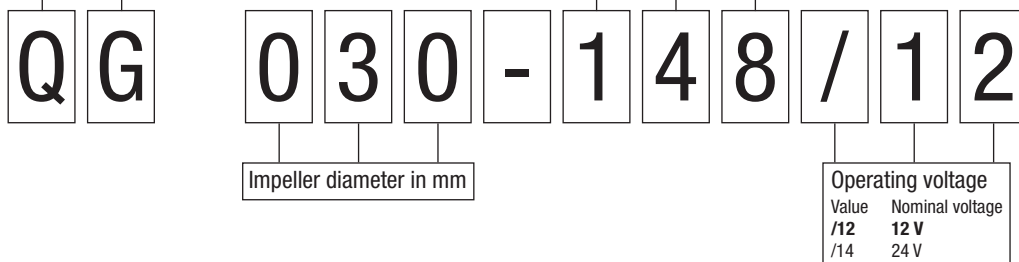
Fan impeller blade height



## Crossflow blower e.g. QG 030-148/12

Type	Housing and fan impeller versions
	Housing Impeller blade design
<b>QG</b>	<b>Round Compressor drum</b>

Housing dimensions (W x H)			
Value	Edge dim. (W x H)	Impeller length	Total length
<b>148</b>	<b>48 x 50 mm</b>	<b>148 mm</b>	<b>201 mm</b>
198	48 x 50 mm	198 mm	258 mm
303	48 x 50 mm	303 mm	363 mm
353	48 x 50 mm	353 mm	413 mm



All measurements are given in mm.

# Type code

## 4-digit GreenTech EC tubeaxial fans axial fan e.g. ACi 4420 HH

### Housing dimensions (W x H x D)

Value	Edge dim. (W x H)	Installation depth (D)
1	Ø 98.5 mm	130 mm
3	92 x 92 mm	38 mm
<b>4</b>	<b>119 x 119 mm</b>	<b>25 / 32 / 38 mm</b>
6	Ø 172	51 mm
8	80 x 80 mm	32 mm

### Operating voltage

Value	Nominal voltage	Frequency	Version
0	115 / 230 V	50 / 60 Hz	Wide voltage range input (85-265 V AC)
1	115 V	50 Hz	
<b>2</b>	<b>230 V</b>	<b>50 Hz</b>	

### Options (various versions possible)

A	Analog speed control input (input voltage: 0...5 / 0...10 V DC)
D	Reinforced flange corners with through-holes (series 44xx F) Constant speed control regardless of operating voltage
E	Economy fan with round flange
F	Flat construction / frequency-modulated signal
G	Sleeve bearing
H	High speed
<b>HH</b>	<b>Further increased speed</b>
H3-H8	Additional further increased speeds (H8 - maximum fan speed)
I	Integrated temperature sensor (NTC behavior, i.e. thermistor)
J	Jet characteristic / rigid curve
L	Low speed
M	Medium speed
ML	Between low and medium speed
N	Standard or basic speed (only DC fans)
O	Multi-option speed control input (analog or PWM signal)
P	PWM speed control input (pulse-width modulated signal)
R	Moisture protection coating
S	Circuit board and winding (IP 20), optional stainless steel ball bearing
S	Speed signal (additional wires for hall signal, obsolete technology)
T	External temperature sensor (NTC behavior, i.e. thermistor)
TD	Turbo drive (extremely powerful 3-phase motor)
U	Environmentally friendly fan (min. IP 54)
V / VP	VARIOFAN
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number

**A C i**      **4 4 2 0**      **H H**

### Basic design

Value	Version
AC	DC basic fan with integrated AC/DC power supply
<b>ACi</b>	<b>EC technology (electronics completely integrated)</b>

### Motor and housing version

Value	Version
0	130 mm (D)
1	51 mm (D)
2	38 / 51 mm (D)
3	32 mm (D)
<b>4</b>	<b>25 / 38 mm (D)</b>

### Bearing type and insulation class

Value	Bearing type	Insulation class
<b>0</b>	<b>Ball bearing</b>	<b>E</b>

## AC axial fan e.g. 3950 L

### Housing dimensions (W x H x D)

Value	Edge dim. (W x H)	Installat. depth (D)
<b>3</b>	<b>92 x 92 mm</b>	<b>25 / 38 mm</b>
4	119 x 119 mm	25 / 32 / 38 mm
5	127 x 127 mm	38 mm
5	135 x 135 mm	38 mm
5	140 x 140 mm	51 mm
6	Ø 172 mm	51 / 52 mm
7	Ø 150 mm	55 mm
7	Ø 150 x 172 mm	38 mm
8	80 x 80 mm	38 mm
9	119 x 119 mm	25 mm

### Operating voltage

Value	Nominal voltage	Frequency
0	115 V	60 Hz
2	115 V	60 Hz
3	115 V	60 Hz
4	115 V	50 Hz
<b>5</b>	<b>230 V</b>	<b>50 Hz</b>
6	115 V / 230 V	50 Hz / 60 Hz
7	230 V	50 Hz
8	230 V	60 Hz
9	230 V	60 Hz

### Options (various versions possible)

A	Intake via bars
E	Made by ebm-papst Mulfingen (6xxx, 7xxx range) or round flange
H	Speed signal
H	1 Impulses per 360 degrees (additional magnet sensor and hall sensor)
<b>L</b>	<b>Low speed</b>
M	Medium speed
N	Air intake via struts (Ø mounting bore hole)
R	Moisture protection coating
S	Circuit board and winding (IP 20), optional stainless steel ball bearing
S	Integrated temperature switch
T	Mounting bracket
U	Environmentally friendly fan (min. IP 54)
V	Air exhaust over struts
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number
Z	Air exhaust over struts, reinforced flange corners with through-holes

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### Motor and housing version

Value	Version
4	Shaded-pole motor, 55 mm (D) medium speed
5	Shaded-pole motor, 38 mm (D) medium / high speed
6	Shaded-pole motor, 38 mm (D) high speed
7	Shaded-pole motor, 38 mm (D) with mounting bracket
8	Shaded-pole motor, slow / medium speed
<b>9</b>	<b>Shaded-pole motor, 25 / 38 mm (D)</b>

### Bearing type and insulation class

Value	Bearing type	Insulation class
<b>0</b>	<b>Sleeve bearing</b>	<b>E</b>
5	Ball bearing	E
6	Ball bearing	F
8	Ball bearing	E

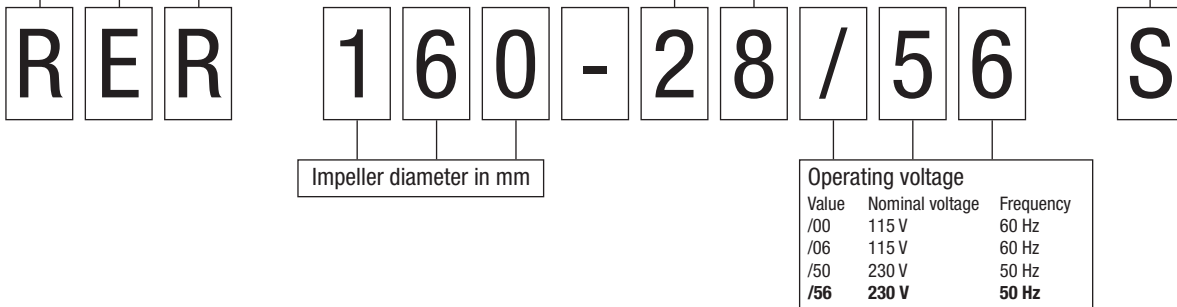
All measurements are given in mm.

# Type code

## AC centrifugal fan e.g. RER 160-28/56 S

Type	Housing and fan impeller versions
RE	None Non-curved, no direction of rotation set
REF	None Forward/backward-curved impeller blades, flat
<b>RER</b>	<b>None Backward-curved impeller blades</b>
RET	None Forward-curved impeller blades
RG	Square Forward/backward-curved impeller blades
RL	Round Forward-curved impeller blades
RLF	Round Forward/backward-curved impeller blades, flat
RV	Round Forward-curved impeller blades

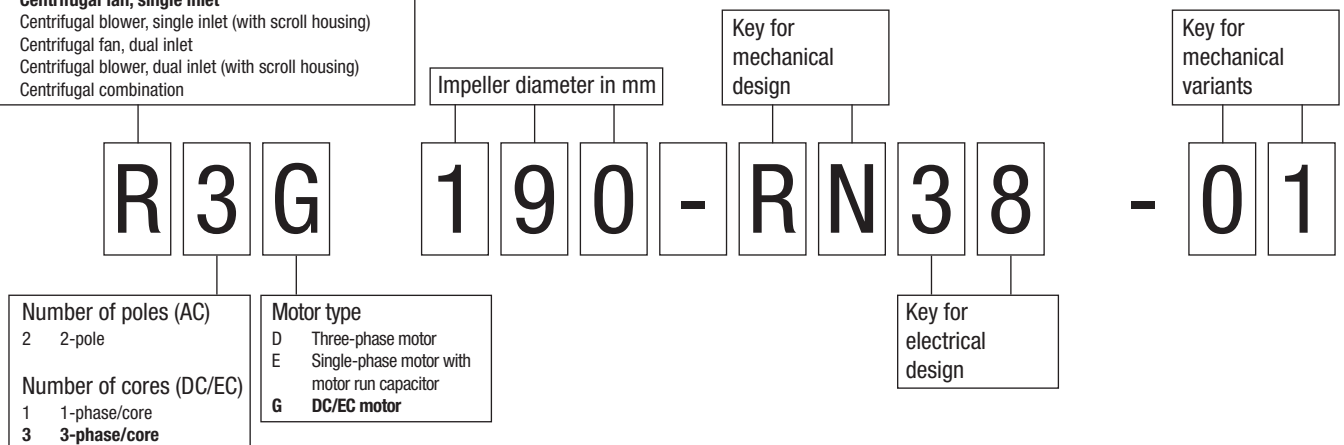
Options (various versions possible)	
A	Intake via bars
E	Made by ebm-papst Mulfingen (6xxx, 7xxx range) or round flange
H	Speed signal 1 Impulses per 360 degrees (additional magnet sensor and hall sensor)
L	Low speed
M	Medium speed
N	Air intake via struts (ø mounting bore hole)
R	Moisture protection coating Circuit board and winding (IP 20), optional stainless steel ball bearing
<b>S</b>	<b>Integrated temperature switch</b>
T	Mounting bracket
U	Environmentally friendly fan (min. IP 54)
V	Air exhaust over struts
W	Additional wires (standard length 310 mm)
X	Mounting bore hole 3.7 mm
-xxx	Variant number
Z	Air exhaust via bars, reinforced flange joints with through-holes



## DC centrifugal fan e.g. R3G 190-RN 38-01

Note: This type code specifies fans from ebm-papst Mulfingen and can be used to clearly identify and order them:

Type	Housing and fan impeller versions
A	Axial fan
S	Axial fan with finger guard
W	Axial fan with fan housing
V	Axial combination
<b>R</b>	<b>Centrifugal fan, single inlet</b>
G	Centrifugal blower, single inlet (with scroll housing)
B	Centrifugal fan, dual inlet
G	Centrifugal blower, dual inlet (with scroll housing)
K	Centrifugal combination



All measurements are given in mm.