

## Vertical mixer

### Wilo-Vardo WEEDLESS VM.F6-1/220.20-110 RM87 DRN90S4/C



#### Drive unit

Drive design	Helical gear motor with corrosion protection OS3/C4
Motor designation	RM87 DRN90S4/C
Mains connection (delta, star)	3~230 V, 3~400 V, 50 Hz
Rated current, direct delta $I_N$	4.45 A
Rated current, direct star $I_N$	2.55 A
Power consumption $P_{1\ max}$	1.30 kW
Rated power $P_2$	1.1 kW
Speed original $n$	1455 1/min
Motor efficiency class	IE3
Motor efficiency 50	83.5 %
Motor efficiency 75	85.0 %
Motor efficiency 100	84.5 %
Power factor $\cos \varphi_{100}$	0.73
Min. ambient temperature $T_{min}$	-20 °C
Max. ambient temperature $T_{max}$	40 °C
Insulation class	F
Protection class motor	IP55
Max. switching frequency $t$	15 rph
min. switching break $t$	3 min
Nominal torque $M$	525 Nm
Explosion protection ATEX	no
Explosion protection FM	no
Motor protection (optional)	Bimetal, PTC
Motor housing	Aluminium
Gear housing	5.1300, EN-GJL-200

#### Filling quantities and types

Filling gear	Gear oil E 460 (Organic)
Gear fill quantity $V$	6.8 l

#### Unit

Power consumption at 40° $P_{1.1}$	0.39 kW
Max. thrust at 40° $F$	510 N
Thrust to power ratio at 40°	1308 N/kW
Min. fluid temperature $T_{min}$	3 °C
Max. fluid temperature $T_{max}$	40 °C
Max. weight $m$	370 kg

#### Propeller

Propeller model	2-blade propeller made of solid material
Nominal propeller diameter $D_{nom}$	2000 mm
Direction of thrust	up/down
Propeller speed $n$	20 1/min
Transmission ratio	72.570
Propeller hub	PUR Polyurethane
Propeller	PUR Polyurethane

#### Mixer shaft

Min. length of mixer shaft $l$	2.0 m
Max. length of mixer shaft $l$	3.5 m
Mixer shaft	1.4571, X6CrNiMoTi17-12-2

#### Motor plate

Number of fastening holes	4
Motor plate	1.4571, X6CrNiMoTi17-12-2