



Milling spindle CS-60-238-S

Drive			
Power:	60 kW (S1)	80 kW (S6)	
Nominal speed:	7.000 r.p.m.		
Torque max.:	82 Nm (S1)	109 Nm (S6)	
Speed max.:	22.000 r.p.m.		
Motor type:	synchronous/4 poles		
Power connection:	400 V/ 117 A (S1)		
Tool system:	HSK-A63		
Clamping system:	hydraulically operated		
Clamping force:	20 kN/60 bar		
Clamping monitoring:	CyCon K 11 (optional)		
Release pressure max.:	100 bar		
Tool cleaning:	Air, 4-6 bar		
Spindle bearing:	<< >> Ø 65 Hybrid		
Bearing rigidity:	axial 193 N/µm, radial 580 N/µm		
Bearing lubrication:	Grease		
Sealing:	with sealing air and labyrinth		
Encoder signal:	1 Vpp/256 teeth		
Spindle cooling:	liquid cooling (Antifrogen N/Tyfocon)		
Power dissipation:	4 kW		
Cooling volume flow approx.:	15 l/min (4 bar)		
Metal removal rate:	Milling	Drilling	Threading
AlMgSi1	5.500 cm³/min	-	-
Tool cooling			
External coolant supply (ECS):	4 Spray nozzles		
Internal coolant supply (ICS):	optional		
max. Pressure/Filter mesh:	45 bar (25 l/min)/40 µm		
MQL external:	optional		
MQL internal:	optional		

