## 2.13.7 8LSA55...-3 / 8LSA57...-3 - Standard motors

8LSA553	Nominal speed nN [rpm]	Resolver	EnDat (inductive)	Holding brake	Connection direction	Shaft end
8LSA55.EA030D000-3	3000		2.1 single-turn			Smooth shaft
8LSA55.EA030D200-3			2.1 Single-turn	Yes		
8LSA55.EB030D000-3			2.1 multi-turn		Angled (swivel connector)	
8LSA55.EB030D200-3			Z. I IIIuiti-tuili	Yes		
8LSA55.R2030D000-3						
8LSA55.R2030D200-3		R2		Yes		
8LSA55.R2030D100-3		K2				Keyed shaft
8LSA55.R2030D300-3				Yes		
8LSA55.DA030S000-3			2.2 single turn			Smooth shaft
8LSA55.DA030S200-3			2.2 single-turn	Yes		
8LSA55.DB030S000-3			2.2 multi-turn		Single-cable solution (hybrid) Angled, swivel connector	
8LSA55.DB030S200-3				Yes		
8LSA55.DA030S100-3			2.2 single-turn			Keyed shaft
8LSA55.DA030S300-3				Yes		
8LSA55.DB030S100-3			2.2 multi-turn			
8LSA55.DB030S300-3			Z.Z IIIUILI-LUIII	Yes		

8LSA573	Nominal speed nN [rpm]	Resolver	EnDat (inductive)	Holding brake	Connection direction	Shaft end
8LSA57.R2030D000-3	3000				- Angled (swivel connector)	Smooth shaft
8LSA57.R2030D200-3		R2		Yes		
8LSA57.R2030D100-3		KZ				Keyed shaft
8LSA57.R2030D300-3				Yes		
8LSA57.DA030S000-3			2.2 single turn			Smooth shaft
8LSA57.DA030S200-3			2.2 single-turn	Yes		
8LSA57.DB030S000-3			2.2 multi-turn		Single-cable solution (hybrid) Angled, swivel connector	
8LSA57.DB030S200-3			Z.Z Multi-tum	Yes		
8LSA57.DA030S100-3			2.2 single-turn			Keyed shaft
8LSA57.DA030S300-3				Yes		
8LSA57.DB030S100-3			2.2 multi-turn			
8LSA57.DB030S300-3				Yes		

## 8LSA55...-3 / 8LSA57...3 - Technical data

Model number	8LSA55.ee030ffgg-3	8LSA57.ee030ffgg-3			
Motor					
Nominal speed n <sub>N</sub> [rpm]	3000				
Number of pole pairs	4				
Nominal torque M <sub>n</sub> [Nm]	11.6	17.5			
Nominal power P <sub>N</sub> [W]	3644	5498			
Nominal current I <sub>N</sub> [A]	7.1	10.7			
Stall torque M <sub>0</sub> [Nm]	12.5	20			
Stall current I <sub>0</sub> [A]	7.7	12.3			
Maximum torque M <sub>max</sub> [Nm]	41.4	69			
Maximum current I <sub>max</sub> [A]	33	52.6			
Maximum speed n <sub>max</sub> [rpm]	9000				
Torque constant K <sub>⊤</sub> [Nm/A]	1.63				
Voltage constant K <sub>E</sub> [V/1000 rpm]	98.44				
Stator resistance $R_{2ph}[\Omega]$	1.127	0.62			
Stator inductance L <sub>2ph</sub> [mH]	12.5	7.21			
Electrical time constant t <sub>el</sub> [ms]	11.1	11.6			
Thermal time constant t <sub>therm</sub> [min]	40	46			
Moment of inertia J [kgcm²]	8.19	13.13			
Weight without brake m [kg]	10.4	14.5			
Holding brake					
Holding torque of brake M <sub>Br</sub> [Nm]	15				
Mass of brake [kg]	1.5	1.3			
Moment of inertia of brake J <sub>Br</sub> [kgcm <sup>2</sup> ]	1.66				
Recommendations					
ACOPOS 8Vxxxx.xx	1090	1180			
ACOPOSmulti 8BVIxxxx	0110				
ACOPOS P3 8EIxxxx	8X8X	017X			
Cross section for B&R motor cables [mm²]	0.75	1.5			
Connector size	1.0				

## Additional technical data

Speed-torque characteristic curve, permissible shaft load and dimensions

see "8LSA5...-3 - Technical data" on page 95

8LS...-3 user's manual V2.50 49