

## YZC Series Low Vibration and Low Noise Induction Motors



- Frame sizes: 80 to 355 Rated output: 0.12 to 375kW
- Voltage: 380V Frequency: 50Hz or 60 Hz
- Duty Cycle: S1 Degree of protection: IP55
- Insulation class: F
- Efficiency levels: IE2 (YZC) / IE3 (YE3ZC)

**Applications:** Low noise, little vibration, ideal for high-accuracy machine tools and precision instruments whose requirements are low noise and little vibration.

**Circumstance for Use:** Altitude not exceeds 1000m above sea level. The ambient temperature shall no higher than 40°C and no lower than -15°C; No special environmental requirements.

### Performance Data

### 380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)	Vibration mm/s
Synchronous speed 3000 r/min											
YZC80M1-2	0.75	1.8	2855	77.4	0.82	2.51	2.2	7.0	2.3	59	0.7
YZC80M2-2	1.1	2.5	2870	79.6	0.83	3.66	2.2	7.3	2.3	59	0.7
YZC90S-2	1.5	3.3	2865	81.3	0.84	5.00	2.2	7.6	2.3	64	0.7
YZC90L-2	2.2	4.7	2870	83.2	0.85	7.32	2.2	7.6	2.3	64	0.7
YZC100L-2	3	6.2	2875	84.6	0.87	9.97	2.2	7.8	2.3	71	0.7
YZC112M-2	4	8.0	2910	85.8	0.88	13.1	2.2	8.3	2.3	74	0.7
YZC132S1-2	5.5	10.9	2935	87.0	0.88	17.9	2.0	8.3	2.3	76	0.7
YZC132S2-2	7.5	14.5	2930	88.1	0.89	24.4	2.0	7.9	2.3	76	0.7
YZC160M1-2	11	21.0	2950	89.4	0.89	35.6	2.0	8.1	2.3	78	1.1
YZC160M2-2	15	28.4	2945	90.3	0.89	48.6	2.0	8.1	2.3	78	1.1
YZC160L-2	18.5	34.7	2945	90.9	0.89	60.0	2.0	8.2	2.3	78	1.1
YZC180M-2	22	41.1	2950	91.3	0.89	71.2	2.0	8.2	2.3	80	1.1
YZC200L1-2	30	55.7	2960	92.0	0.89	96.8	2.0	7.6	2.3	81	1.1
YZC200L2-2	37	68.3	2960	92.5	0.89	119	2.0	7.6	2.3	81	1.1
YZC225M-2	45	82.7	2965	92.9	0.89	145	2.0	7.7	2.3	83	1.1
YZC250M-2	55	101	2970	93.2	0.89	177	2.0	7.1	2.3	86	1.1
YZC280S-2	75	134	2975	94.7	0.90	241	1.8	7.1	2.3	89	1.1
YZC280M-2	90	160	2975	95.0	0.90	289	1.8	7.1	2.3	89	1.1

### Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)	Vibration mm/s
Synchronous speed 3000 r/min											
YZC315S-2	110	197	2975	94.3	0.90	353	1.8	7.1	2.3	90	1.8
YZC315M-2	132	236	2975	94.6	0.90	424	1.8	7.1	2.3	90	1.8
YZC315L1-2	160	282	2975	94.8	0.91	514	1.8	7.2	2.3	90	1.8
YZC315L-2	185	325	2975	94.9	0.91	594	1.8	7.2	2.3	90	1.8
YZC315L2-2	200	352	2975	95.0	0.91	642	1.8	7.2	2.2	90	1.8
YZC315L3-2	220	387	2975	95.0	0.91	706	1.8	7.2	2.2	90	1.8
YZC355M1-2	220	387	2980	95.0	0.91	705	1.8	7.2	2.2	98	1.8
YZC355M-2	250	439	2980	95.0	0.91	801	1.6	7.2	2.2	98	1.8
YZC355L1-2	280	492	2980	95.0	0.91	897	1.6	7.2	2.2	98	1.8
YZC355L-2	315	554	2980	95.0	0.91	1009	1.6	7.2	2.2	98	1.8
YZC355L2-2	355	624	2980	95.0	0.91	1138	1.6	7.2	2.2	102	1.8
YZC355L3-2	375	659	2980	95.0	0.91	1202	1.6	7.2	2.2	102	1.8
Synchronous speed 1500 r/min											
YZC80M1-4	0.55	1.4	1430	79.0	0.75	3.7	2.3	6.0	2.3	53	0.7
YZC80M2-4	0.75	1.9	1425	79.6	0.76	5.0	2.3	6.6	2.3	53	0.7
YZC90S-4	1.1	2.7	1420	81.4	0.77	7.4	2.3	6.8	2.3	56	0.7
YZC90L-4	1.5	3.5	1420	82.8	0.78	10.1	2.3	7.0	2.3	56	0.7
YZC100L1-4	2.2	5.0	1430	84.3	0.80	14.7	2.3	7.6	2.3	61	0.7
YZC100L2-4	3	6.6	1430	85.5	0.81	20.0	2.3	7.6	2.3	61	0.7
YZC112M-4	4	8.7	1450	86.6	0.81	26.3	2.2	7.8	2.3	62	0.7
YZC132S-4	5.5	11.6	1465	87.7	0.82	35.9	2.0	7.9	2.3	68	0.7
YZC132M-4	7.5	15.5	1465	88.7	0.83	48.9	2.0	7.5	2.3	68	0.7
YZC160M-4	11	22.4	1470	89.8	0.83	71.5	2.0	7.7	2.3	70	1.1
YZC160L-4	15	29.9	1470	90.6	0.84	97.4	2.0	7.8	2.3	70	1.1
YZC180M-4	18.5	36.3	1470	91.2	0.85	120	2.0	7.8	2.3	73	1.1
YZC180L-4	22	42.9	1465	91.6	0.85	143	2.0	7.8	2.3	73	1.1
YZC200L-4	30	58.1	1475	92.3	0.85	194	2.0	7.3	2.3	73	1.1
YZC225S-4	37	70.5	1480	92.7	0.86	239	2.0	7.4	2.3	75	1.1
YZC225M-4	45	85.4	1480	93.1	0.86	290	2.0	7.4	2.3	75	1.1
YZC250M-4	55	104	1485	93.5	0.86	354	2.0	7.4	2.3	76	1.1
YZC280S-4	75	139	1490	94.0	0.87	481	2.0	6.9	2.3	77	1.1
YZC280M-4	90	165	1485	94.2	0.88	579	2.0	6.9	2.3	77	1.1
YZC315S-4	110	199	1485	94.5	0.89	707	2.0	7.0	2.2	86	1.8
YZC315M-4	132	238	1485	94.7	0.89	849	2.0	7.0	2.2	86	1.8

### Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)	Vibration mm/s
Synchronous speed 1500 r/min											
YZC315L1-4	160	285	1485	94.9	0.90	1029	2.0	7.1	2.2	86	1.8
YZC315L-4	185	329	1485	95.0	0.90	1190	2.0	7.1	2.2	86	1.8
YZC315L2-4	200	355	1485	95.1	0.90	1286	2.0	7.1	2.2	86	1.8
YZC315L3-4	220	391	1485	95.1	0.90	1415	2.0	7.1	2.2	86	1.8
YZC355M1-4	220	391	1490	95.1	0.90	1410	2.0	7.1	2.2	93	1.8
YZC355M-4	250	444	1490	95.1	0.90	1602	2.0	7.1	2.2	93	1.8
YZC355L1-4	280	497	1490	95.1	0.90	1795	2.0	7.1	2.2	93	1.8
YZC355L-4	315	559	1490	95.1	0.90	2019	2.0	7.1	2.2	93	1.8
YZC355L2-4	355	645	1490	95.1	0.88	2275	1.7	7.0	2.2	100	1.8
YZC355L3-4	375	681	1490	95.1	0.88	2404	1.7	7.0	2.2	100	1.8
Synchronous speed 1000 r/min											
YZC80M1-6	0.37	1.2	910	67.0	0.70	3.9	1.9	5.5	2.0	50	0.7
YZC80M2-6	0.55	1.7	910	70.0	0.71	5.8	1.9	5.5	2.1	50	0.7
YZC90S-6	0.75	2.1	935	75.9	0.71	7.7	2.0	6.0	2.1	54	0.7
YZC90L-6	1.1	3.0	935	78.1	0.72	11.2	2.0	6.0	2.1	54	0.7
YZC100L-6	1.5	4.0	945	79.8	0.72	15.2	2.0	6.5	2.1	58	0.7
YZC112M-6	2.2	5.7	965	81.8	0.72	21.8	2.0	6.6	2.1	62	0.7
YZC132S-6	3	7.6	975	83.3	0.72	29.4	1.9	6.8	2.1	66	0.7
YZC132M1-6	4	9.7	975	84.6	0.74	39.2	1.9	6.8	2.1	66	0.7
YZC132M2-6	5.5	13.0	975	86.0	0.75	53.9	1.9	7.0	2.1	66	0.7
YZC160M-6	7.5	16.8	975	87.2	0.78	73.5	2.0	7.0	2.1	70	1.1
YZC160L-6	11	23.9	975	88.7	0.79	108	2.0	7.2	2.1	70	1.1
YZC180L-6	15	31.8	980	89.7	0.80	146	1.9	7.3	2.1	70	1.1
YZC200L1-6	18.5	38.9	980	90.4	0.80	180	1.9	7.3	2.1	70	1.1
YZC200L2-6	22	45.4	980	90.9	0.81	214	1.9	7.4	2.1	70	1.1
YZC225M-6	30	60.6	985	91.7	0.82	291	1.9	6.9	2.1	71	1.1
YZC250M-6	37	73.5	985	92.2	0.83	359	1.9	7.1	2.1	73	1.1
YZC280S-6	45	86.8	990	92.7	0.85	434	1.9	7.3	2.0	75	1.1
YZC280M-6	55	104	990	93.1	0.86	531	1.9	7.3	2.0	75	1.1
YZC315S-6	75	145	990	93.7	0.84	723	1.9	6.6	2.0	80	1.8
YZC315M-6	90	171	990	94.0	0.85	868	1.9	6.7	2.0	80	1.8
YZC315L1-6	110	209	990	94.3	0.85	1061	1.9	6.7	2.0	80	1.8
YZC315L2-6	132	247	990	94.6	0.86	1273	1.9	6.8	2.0	80	1.8
YZC315L3-6	160	298	990	94.8	0.86	1543	1.9	6.8	2.0	80	1.8

YZC355M1-6	160	298	990	94.8	0.86	1543	1.9	6.8	2.0	82	1.8
------------	-----	-----	-----	------	------	------	-----	-----	-----	----	-----

**Performance Data**

**380V 50Hz**

Model	Output kW	FLA	RPM	Eff. %	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{I_{st}}{I_N}$	$\frac{LRA}{FLA} \frac{I_{st}}{I_N}$	$\frac{BDT}{FLT} \frac{T_{max}}{T_N}$	dB(A)	Vibration mm/s
Synchronous speed 1000 r/min											
YZC355M-6	185	344	990	94.9	0.86	1785	1.9	6.8	2.0	82	1.8
YZC355M2-6	200	372	990	95.0	0.86	1929	1.9	6.8	2.0	82	1.8
YZC355L1-6	220	409	990	95.0	0.86	2122	1.9	6.8	2.0	82	1.8
YZC355L-6	250	465	990	95.0	0.86	2412	1.9	6.8	2.0	82	1.8
YZC355L2-6	280	521	990	95.0	0.86	2701	1.9	6.8	2.0	88	1.8
YZC355L3-6	315	586	995	95.0	0.86	3023	1.9	6.8	2.0	88	1.8
Synchronous speed 750 r/min											
YZC80M1-8	0.18	0.8	700	52.8	0.61	2.5	1.8	3.3	1.9	50	0.7
YZC80M2-8	0.25	1.1	700	57.0	0.61	3.4	1.8	3.3	1.9	50	0.7
YZC90S-8	0.37	1.4	695	64.0	0.62	5.1	1.8	4.0	1.9	54	0.7
YZC90L-8	0.55	2.0	695	67.5	0.63	7.6	1.8	4.0	1.9	54	0.7
YZC100L1-8	0.75	2.3	705	71.5	0.68	10.2	1.8	4.0	2.0	58	0.7
YZC100L2-8	1.1	3.3	705	74.5	0.69	14.9	1.8	4.0	2.0	58	0.7
YZC112M-8	1.5	4.4	715	75.4	0.69	20.0	1.8	4.0	2.0	62	0.7
YZC132S-8	2.2	6.0	730	78.2	0.71	28.8	1.8	5.5	2.2	64	0.7
YZC132M-8	3	7.7	730	80.6	0.73	39.2	1.8	5.5	2.2	64	0.7
YZC160M1-8	4	10.1	725	82.7	0.73	52.7	1.9	6.0	2.2	69	1.1
YZC160M2-8	5.5	13.4	725	84.3	0.74	72.4	1.9	6.0	2.2	69	1.1
YZC160L-8	7.5	17.7	730	85.8	0.75	98.1	1.9	6.0	2.2	69	1.1
YZC180L-8	11	25.0	725	87.8	0.76	145	1.9	6.0	2.2	69	1.1
YZC200L-8	15	33.7	730	89.0	0.76	196	2.0	6.5	2.2	69	1.1
YZC225S-8	18.5	40.0	735	90.2	0.78	240	2.0	6.5	2.2	70	1.1
YZC225M-8	22	47.4	735	90.5	0.78	286	2.0	6.5	2.2	70	1.1
YZC250M-8	30	63.4	735	91.0	0.79	390	1.9	6.5	2.0	71	1.1
YZC280S-8	37	77.8	740	91.5	0.79	478	1.8	6.0	2.0	72	1.1
YZC280M-8	45	93.9	740	92.2	0.79	581	1.8	6.0	2.0	72	1.1
YZC315S-8	55	111	740	93.1	0.81	710	1.8	6.5	2.0	80	1.8
YZC315M-8	75	151	740	93.2	0.81	968	1.8	6.5	2.0	80	1.8
YZC315L1-8	90	181	740	93.2	0.81	1161	1.8	6.5	2.0	80	1.8
YZC315L2-8	110	218	740	93.5	0.82	1420	1.8	6.5	2.0	80	1.8
YZC355M1-8	132	261	745	93.7	0.82	1692	1.8	6.5	2.0	81	1.8
YZC355M2-8	160	314	745	94.3	0.82	2051	1.8	6.5	2.0	81	1.8
YZC355L1-8	185	364	745	94.3	0.82	2371	1.8	6.5	2.0	81	1.8

YZC355L-8	200	392	745	94.5	0.82	2564	1.8	6.5	2.0	81	1.8
-----------	-----	-----	-----	------	------	------	-----	-----	-----	----	-----

### Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)	Vibration mm/s
Synchronous speed 750r/min											
YZC355L2-8	220	431	745	94.5	0.82	2820	1.8	6.5	2.0	87	1.8
YZC355L3-8	250	484	745	94.5	0.83	3205	1.8	6.5	2.0	87	1.8
Synchronous speed 600 r/min											
YZC315S-10	45	100	590	91.5	0.75	728	1.5	6.0	2.0	80	1.8
YZC315M-10	55	121	590	92.0	0.75	890	1.5	6.0	2.0	80	1.8
YZC315L1-10	75	162	590	92.5	0.76	1214	1.5	6.0	2.0	80	1.8
YZC315L2-10	90	191	590	93.0	0.77	1457	1.5	6.0	2.0	80	1.8
YZC355M1-10	110	230	595	93.2	0.78	1766	1.3	5.5	2.0	81	1.8
YZC355M2-10	132	275	595	93.6	0.78	2119	1.3	5.5	2.0	81	1.8
YZC355L1-10	160	333	595	93.6	0.78	2568	1.3	5.5	2.0	81	1.8
YZC355L-10	185	385	595	93.6	0.78	2969	1.3	5.5	2.0	81	1.8
YZC355L2-10	200	416	595	93.6	0.78	3210	1.3	5.5	2.0	87	1.8
YZC355L3-10	220	458	595	93.6	0.78	3531	1.3	5.5	2.0	87	1.8

Conventional mounting type and suitable frame size are given in following table (with “√”)

Frame	Basic Type			Derived Type											
	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V35	B14	B34	V18
80~112	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
132~160	√	√	√	√	√	√	√	√	√	√	√	√	-	-	-
180~280	√	√	√	√	-	-	-	-	-	-	-	-	-	-	-
315~355	√	-	√	√	-	-	-	-	-	-	-	-	-	-	-

Note:

1. The mounting dimensions are almost the same as those of YX3 series induction motors.
2. Data above may be changed without prior notice.