Product introduction

T3a/T3L series digital AC servo drives are general-purpose AC servo drive products with domestic leading level. This series of products adopts advanced full digital control and AC motor vector control theory, with excellent system performance and high reliability, and is widely used in servo shaft drive of food processing, packaging machinery, textile machinery and other related automation industrial machinery.

Product Features

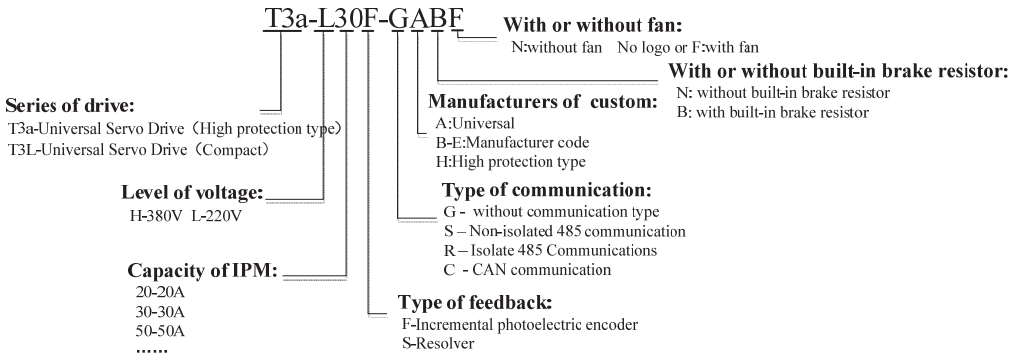
T3a series fully sealed design, good protection and strong anti-interference ability

The compact design of T3L series saves installation space

Integrate speed control, position control and torque control

Can drive various types of permanent magnet synchronous servo motors

Excellent low-speed torque characteristics and industry-leading dynamic acceleration and deceleration performance



◆ Description of servo motor model

EXAMPLE:

110ST	-M	040	30	M	A	Z
1	2	3	4	5	6	7

1. Sine-wave permanent magnet synchronous AC servo motor
   Foundation number: 80, 90, 110, 130 and 150

2. Types of encoder: M – Photoelectric type X – Magnetoelectric type

3. Rated torque: 040 × 0.1 = 4 Nm

4. Rated speed: 30 × 100 =3000 r/min

5. Resolution of encoder:
   F – 2500 p/r incremental type (Default) F1 – 2500 p/r wire-saving type
   M – 17-bit multi-turn (TAMAGAWA) M1 – 17-bit multi-turn (DANAHER)
   E – 17-bit single-turn (TAMAGAWA)

6. Structure of shaft extension: Default – Standard smooth and straight shaft
   A – Straight with standard keyway
   C – Straight with special keyway

7. Holding brake: Default – Without brake Z – With brake

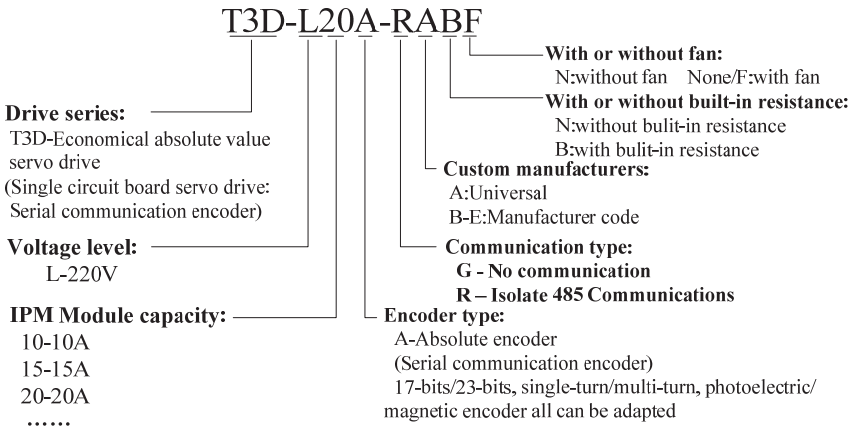
Product introduction

T3D series universal servo driver adopts advanced full digital control and vector control theory of AC motor, and adaptive serial communication absolute value encoder. The **T3D** servo has excellent performance and high reliability, and is widely applicable to all kinds of universal automation equipment.

Product features

- High performance multi-platform DSP/ARM processor chip is adopted, and the control performance is excellent.
- 17 bits/23 bits, single turn/multi turn serial communication encoders are adopted, with high positioning accuracy and good servo shaft rigidity.
- Full sealing design, good protection and strong anti-interference ability.
- Compact single circuit board design, save the installation space.
- The latest industrial-grade IPM module is selected, with strong overload driving ability.
- Various control modes include position control mode, speed control mode and torque control mode are all supported.
- Various types of permanent magnet synchronous servo motors can be driven.
- Complete fault protection and status monitoring functions are available.

Model specification



6.2 Standard motor adaptation table (5-pole pairs motor, 17-bits absolute value magnetic encoder)

Table 6.2 Matching list of 5 pole pairs motor with T3D driver

(Motor series code P-099: 5-nA5)

Motor code (P-002) Automatic identification	Suitable Drive Models (AC 220V)	Type of servo motor (220V)	Rated power (kW)	Rated current (A)	Rated torque (Nm)	Over-load ratio
0	L15	40AST-A1C00330	0.1	1.1	0.32	3
1	L15	60AST-A1C00630	0.2	1.1	0.64	3
2	**L15**	**60AST-A1C01330**	**0.4**	**2.8**	**1.27**	**2.8**
	L15	**60AST-A1C01930**	0.6	3.6	1.9	2
3	L15	80AST-A1C01330	0.4	2.8	1.27	2.5
4	**L20**	**80AST-A1C02430**	**0.75**	**4.5**	**2.39**	**2.5**
	L20	**80AST-A1C03230**	1.0	4.8	3.2	2.5
5	L20	80AST-A1C03220	0.67	5.6	3.2	2
	L20	**80AST-A1C04025**	1.0	4.5	3.8	2.5
6	L20/L30	110AST-A1C04220	0.88	4.5	4.2	2.2/3
7	L20/L30	110AST-A1C05420	1.1	5.5	5.4	2/2.7
8	L30	110AST-A1C06420	1.3	6.5	6.4	2.5
9	L30/L40	110AST-A1C07520	1.6	8.0	7.5	2/2.5
10	L30	110AST-A1C04230	1.3	6.5	4.2	2.5
11	L30/L40	110AST-A1C05430	1.7	8.2	5.4	2/2.5
12	L30/L40	110AST-A1C06425	1.7	9.5	6.4	1.7/2
13	L30	130AST-A1C05415	0.85	6.5	5.4	2.5
14	L30/L40	130AST-A1C06415	1.0	8.0	6.4	2/2.5
15	L30/L40	130AST-A1C07515	1.2	9.0	7.5	1.7/2
16	L30/L40	130AST-A1C08415	1.3	9.5	8.4	1.7/2
17	L30/L40	130AST-A1C09615	1.5	10.0	9.6	1.5/2

Naming rules for motor models