

# HS580系列

液压伺服专用驱动器



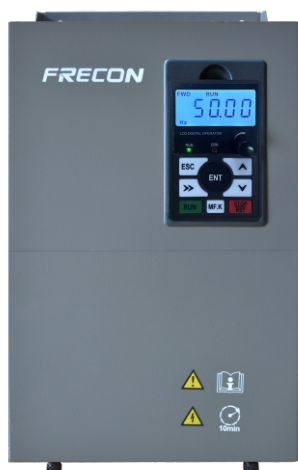
**FRECON**  
孚瑞肯电气





## 产品概述

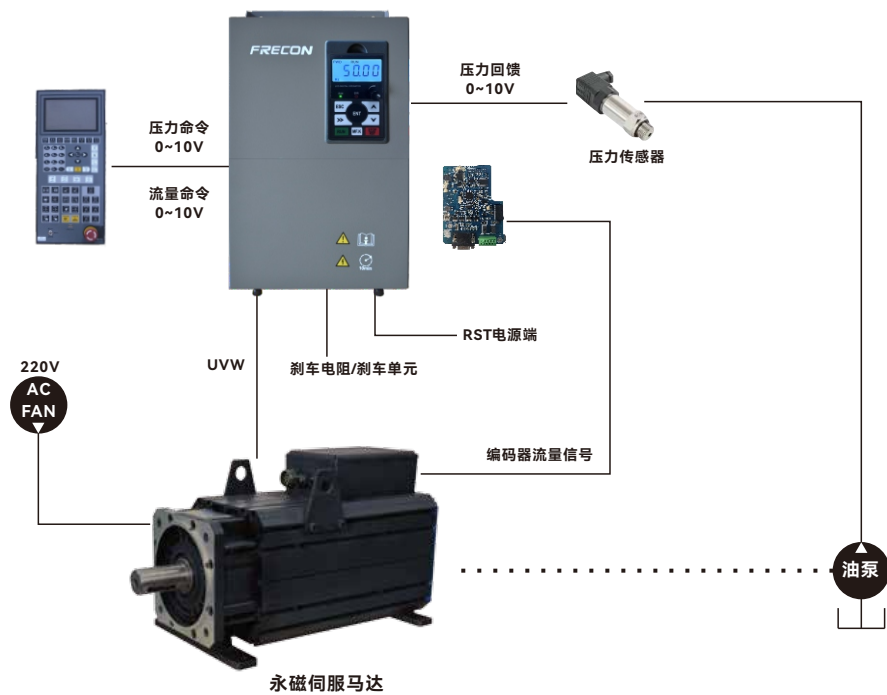
液压伺服系统配备了高性能的液压伺服驱动器，并配了旋转编码器和压力传感器分别对流量和压力进行反馈，高性能的同步伺服电机通过改变转速和转矩做出相应的流量压力调整，对压力流量进行精确的闭环控制，实现伺服电机对注塑机能量需求的最佳匹配和自动调整。



## 产品特点

- 支持4台并机控制
- 110kW及以下内置制动单元
- 具有过流，过压，短路等多种保护功能
- 起压速度快，稳压精度高，超压过冲范围小
- 压力与流量均为闭环控制，精度高，响应速度快
- 丰富的通讯功能  
(标配内置CAN、RS485，可选EtherCAT、Profibus)

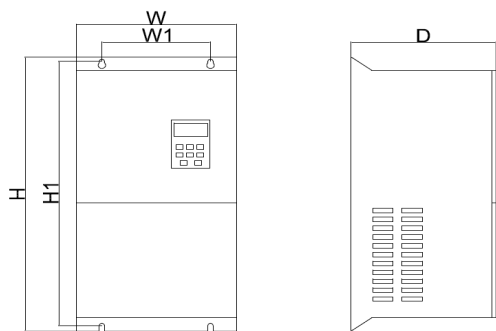
系统图



电气规格

| 型号                           | 容量<br>(KVA) | 额定输入电流<br>(A) | 额定输出电流<br>(A) | 适配电机  |       |
|------------------------------|-------------|---------------|---------------|-------|-------|
|                              |             |               |               | kW    | HP    |
| 三相电源 380V, 50/60Hz -15%~+30% |             |               |               |       |       |
| HS580-4T-7.5B                | 11.0        | 20.5          | 17.0          | 7.5   | 10.0  |
| HS580-4T-011B                | 17.0        | 26.0          | 25.0          | 11.0  | 15.0  |
| HS580-4T-015B                | 21.0        | 35.0          | 32.0          | 15.0  | 20.0  |
| HS580-4T-018B                | 24.0        | 38.5          | 37.0          | 18.5  | 25.0  |
| HS580-4T-022B                | 30.0        | 46.5          | 45.0          | 22.0  | 30.0  |
| HS580-4T-030B                | 40.0        | 62.0          | 60.0          | 30.0  | 40.0  |
| HS580-4T-037B                | 57.0        | 76.0          | 75.0          | 37.0  | 50.0  |
| HS580-4T-045B                | 69.0        | 92.0          | 91.0          | 45.0  | 60.0  |
| HS580-4T-055B                | 85.0        | 113.0         | 112.0         | 55.0  | 70.0  |
| HS580-4T-075B                | 114.0       | 157.0         | 150.0         | 75.0  | 100.0 |
| HS580-4T-090B                | 134.0       | 186.0         | 176.0         | 90.0  | 125.0 |
| HS580-4T-110(B)              | 160.0       | 220.0         | 210.0         | 110.0 | 150.0 |
| HS580-4T-132                 | 192.0       | 260.0         | 253.0         | 132.0 | 175.0 |
| HS580-4T-160                 | 231.0       | 310.0         | 304.0         | 160.0 | 210.0 |
| HS580-4T-185                 | 240.0       | 355.0         | 350.0         | 185.0 | 250.0 |
| HS580-4T-200                 | 250.0       | 382.0         | 377.0         | 200.0 | 260.0 |
| HS580-4T-220                 | 280.0       | 430.0         | 426.0         | 220.0 | 300.0 |
| HS580-4T-250                 | 355.0       | 475.0         | 470.0         | 250.0 | 330.0 |
| HS580-4T-280                 | 396.0       | 535.0         | 520.0         | 280.0 | 370.0 |
| HS580-4T-315                 | 445.0       | 610.0         | 600.0         | 315.0 | 420.0 |

尺寸图



| 型号                           | 外形尺寸 (mm) |       |       | 安装尺寸 (mm) |       | 安装孔径  | 重量 (kg) |
|------------------------------|-----------|-------|-------|-----------|-------|-------|---------|
|                              | W         | H     | D     | W1        | H1    |       |         |
| 三相电源 380V, 50/60Hz -15%~+30% |           |       |       |           |       |       |         |
| HS580-4T-7.5B                | 146.0     | 249.0 | 117.0 | 131.0     | 236.0 | φ5.5  | 3.9     |
| HS580-4T-011B                |           |       |       |           |       |       |         |
| HS580-4T-015B                |           |       |       |           |       |       |         |
| HS580-4T-018B                | 198.0     | 300.0 | 185.0 | 183.0     | 287.0 | φ5.5  | 6.2     |
| HS580-4T-022B                |           |       |       |           |       |       |         |
| HS580-4T-030B                |           |       |       |           |       |       |         |
| HS580-4T-037B                | 250.0     | 432.4 | 226.9 | 200.0     | 411.0 | φ7.0  | 11.8    |
| HS580-4T-045B                |           |       |       |           |       |       |         |
| HS580-4T-055B                |           |       |       |           |       |       |         |
| HS580-4T-075B                | 310.0     | 622.4 | 281.2 | 200.0     | 601.0 | φ9.5  | 26.0    |
| HS580-4T-090B                |           |       |       |           |       |       |         |
| HS580-4T-110(B)              |           |       |       |           |       |       |         |
| HS580-4T-132                 | 310.0     | 653.0 | 351.5 | 200.0     | 620.0 | φ11.5 | 45.0    |
| HS580-4T-160                 |           |       |       |           |       |       |         |
| HS580-4T-185                 |           |       |       |           |       |       |         |
| HS580-4T-200                 | 500.0     | 300.0 | 855   | 822.0     | 370.0 | φ12.0 | 112.0   |
| HS580-4T-220                 |           |       |       |           |       |       |         |
| HS580-4T-250                 |           |       |       |           |       |       |         |
| HS580-4T-280                 | 540.0     | 340.0 | 924.5 | 896.0     | 380.0 | φ12.0 | 120.0   |
| HS580-4T-315                 |           |       |       |           |       |       |         |
| HS580-4T-315                 | 620.0     | 400.0 | 996   | 963.0     | 390.0 | φ12.0 | 133.0   |

配置选型表

| 型号                                   | 额定输出电流 (A) | 适配电机容量 (kW) | 输入电流 (A) | 适配液压系统最大流量 (L/min) | 适配液压系统压力(Mpa) |
|--------------------------------------|------------|-------------|----------|--------------------|---------------|
| 输入电压(V) 三相电源 380V, 50/60Hz -15%~+20% |            |             |          |                    |               |
| HS580-4T-7.5B                        | 17.0       | 7.5         | 20.0     | 40.0               | 17.5          |
| HS580-4T-011B                        | 25.0       | 11.0        | 26.0     | 60.0               |               |
| HS580-4T-015B                        | 32.0       | 15.0        | 35.0     | 75.0               |               |

配置选型表

|                 |       |       |       |        |      |
|-----------------|-------|-------|-------|--------|------|
| HS580-4T-018B   | 37.0  | 18.5  | 39.0  | 85.0   | 17.5 |
| HS580-4T-022B   | 45.0  | 22.0  | 47.0  | 105.0  |      |
| HS580-4T-030B   | 60.0  | 30.0  | 62.0  | 140.0  |      |
| HS580-4T-037B   | 75.0  | 37.0  | 76.0  | 180.0  |      |
| HS580-4T-045B   | 91.0  | 45.0  | 92.0  | 210.0  |      |
| HS580-4T-055B   | 112.0 | 55.0  | 112.0 | 260.0  |      |
| HS580-4T-075B   | 150.0 | 75.0  | 153.0 | 360.0  |      |
| HS580-4T-090B   | 176.0 | 90.0  | 160.0 | 420.0  |      |
| HS580-4T-110(B) | 210.0 | 110.0 | 190.0 | 500.0  |      |
| HS580-4T-132    | 253.0 | 132.0 | 232.0 | 600.0  |      |
| HS580-4T-160    | 304.0 | 160.0 | 310.0 | 700.0  |      |
| HS580-4T-185    | 350.0 | 185.0 | 355.0 | 780.0  |      |
| HS580-4T-200    | 377.0 | 200.0 | 382.0 | 840.0  |      |
| HS580-4T-220    | 426.0 | 220.0 | 430.0 | 920.0  |      |
| HS580-4T-250    | 470.0 | 250.0 | 475.0 | 1050.0 |      |
| HS580-4T-280    | 520.0 | 280.0 | 535.0 | 1180.0 |      |
| HS580-4T-315    | 600.0 | 315.0 | 610.0 | 1335.0 |      |

制动组件表

| 型号              | 制动电阻推荐功率 | 制动电阻推荐阻值 | 制动单元 |
|-----------------|----------|----------|------|
| HS580-4T-7.5B   | 500W     | ≥65Ω     | 标准内置 |
| HS580-4T-011B   | 800W     | ≥43Ω     |      |
| HS580-4T-015B   | 1000W    | ≥32Ω     |      |
| HS580-4T-018B   | 1300W    | ≥25Ω     |      |
| HS580-4T-022B   | 1500W    | ≥22Ω     |      |
| HS580-4T-030B   | 2500W    | ≥16Ω     |      |
| HS580-4T-037B   | 3700W    | ≥16Ω     |      |
| HS580-4T-045B   | 4500W    | ≥16Ω     |      |
| HS580-4T-055B   | 5500W    | ≥16Ω     |      |
| HS580-4T-075B   | 7500W    | ≥12Ω     |      |
| HS580-4T-090B   | 4500W*2  | ≥16Ω*2   | 可选内置 |
| HS580-4T-110(B) | 5500W*2  | ≥12Ω*2   |      |
| HS580-4T-132    | 7500W*2  | ≥12Ω*2   |      |
| HS580-4T-160    | 5500W*3  | ≥12Ω*3   | 外置   |
| HS580-4T-185    | 38000W   | 3.4Ω     |      |
| HS580-4T-200    | 38000W   | 3.4Ω     |      |
| HS580-4T-220    | 42000W   | 3Ω       |      |
| HS580-4T-250    | 42000W   | 3Ω       |      |
| HS580-4T-280    | 54000W   | 2Ω       |      |
| HS580-4T-315    | 54000W   | 2Ω       |      |

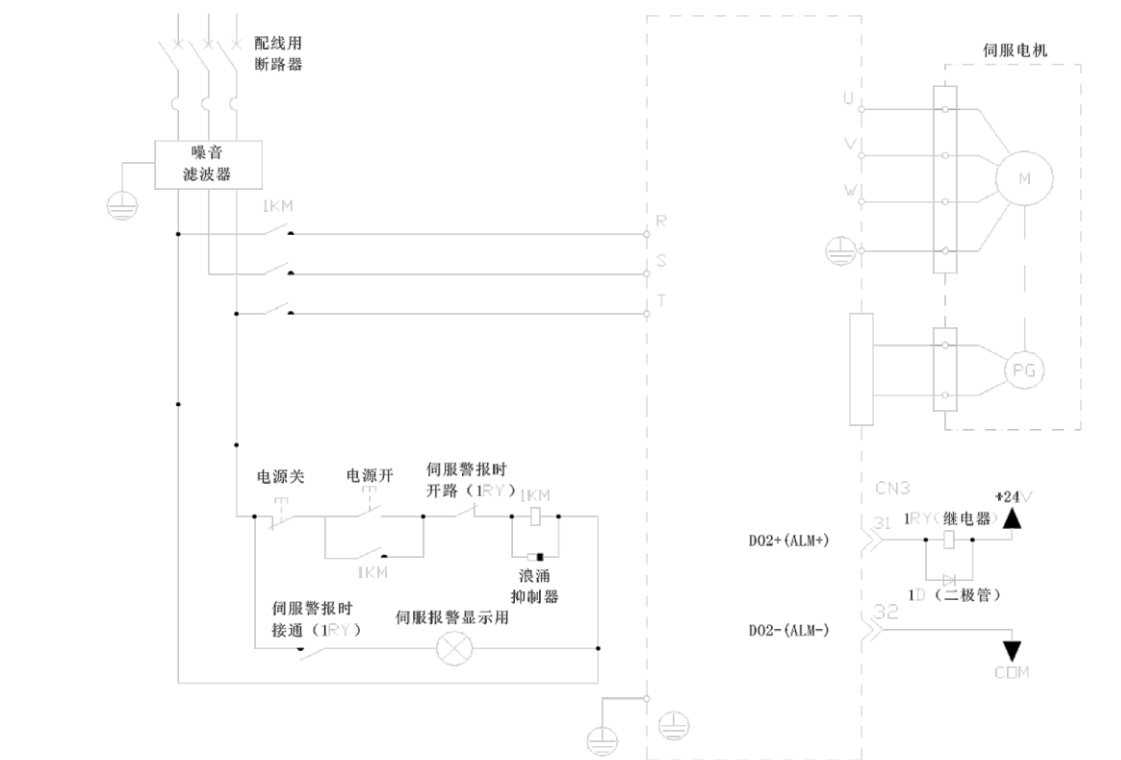
注：\*2表示两个制动单元带各自的制动电阻并联使用

接线选型表

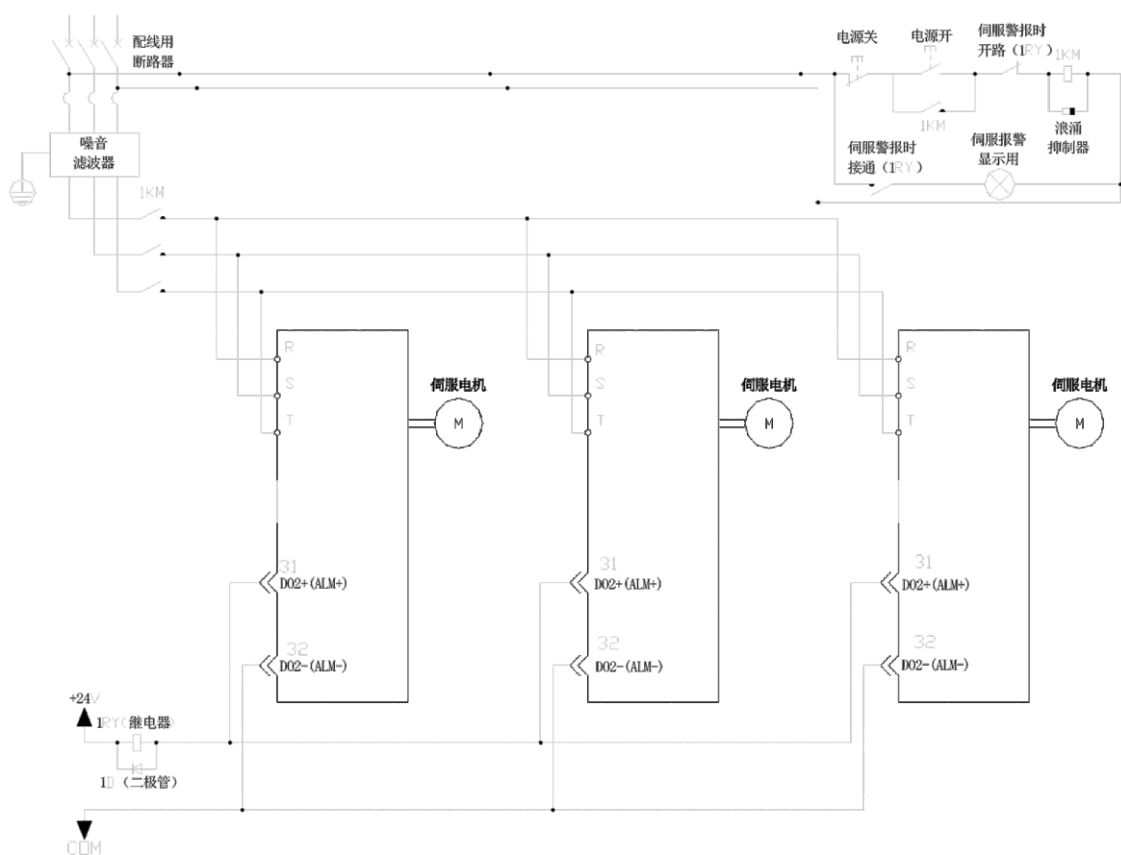
| 型号              | 空开MCCB<br>(A) | 接触器<br>(A) | EMC输入<br>滤波器(A) | 输入输出主回路<br>导线(mm²) | 控制回路导线 |
|-----------------|---------------|------------|-----------------|--------------------|--------|
| HS580-4T-7.5B   | 40.0          | 32.0       | 35.0            | 4.0                | 1.5    |
| HS580-4T-011B   | 63.0          | 40.0       | 50.0            | 6.0                |        |
| HS580-4T-015B   | 63.0          | 40.0       | 50.0            | 10.0               |        |
| HS580-4T-018B   | 100.0         | 63.0       | 80.0            | 10.0               |        |
| HS580-4T-022B   | 100.0         | 63.0       | 80.0            | 16.0               |        |
| HS580-4T-030B   | 125.0         | 100.0      | 100.0           | 16.0               |        |
| HS580-4T-037B   | 160.0         | 100.0      | 120.0           | 16.0               |        |
| HS580-4T-045B   | 200.0         | 125.0      | 150.0           | 25.0               |        |
| HS580-4T-055B   | 200.0         | 125.0      | 150.0           | 35.0               |        |
| HS580-4T-075B   | 250.0         | 160.0      | 200.0           | 50.0               |        |
| HS580-4T-090B   | 250.0         | 160.0      | 200.0           | 70.0               |        |
| HS580-4T-110(B) | 350.0         | 350.0      | 250.0           | 120.0              |        |
| HS580-4T-132    | 400.0         | 400.0      | 300.0           | 150.0              |        |
| HS580-4T-160    | 500.0         | 400.0      | 400.0           | 150.0              |        |
| HS580-4T-185    | 600.0         | 600.0      | 400.0           | 185.0              |        |
| HS580-4T-200    | 600.0         | 600.0      | 400.0           | 150.0*2            |        |
| HS580-4T-220    | 600.0         | 600.0      | 600.0           | 150.0*2            |        |
| HS580-4T-250    | 800.0         | 600.0      | 600.0           | 185.0*2            |        |
| HS580-4T-280    | 800.0         | 800.0      | 600.0           | 185*2              |        |
| HS580-4T-315    | 800.0         | 800.0      | 900.0           | 150.0*3            |        |

# 主回路接线

## 使用单台伺服驱动器接线



## 使用多台伺服驱动器接线





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