



# CH-160D3 77K CRYOCOOLER SERIES



The CH-160D3 single-stage Gifford-McMahon Cryocooler is SHI's newest and highest-capacity 77K Cryocooler, with a first-stage capacity of 600/725 W @ 77 K (50/60 Hz).

The CH-160D3 is ideal for a number of applications, including liquid nitrogen generation and liquefaction; clean energy technologies; and high temperature superconducting applications such as cables, fault current limiters, wind turbines, ship motors and accelerator magnets.

It is available as a complete system, along with two (2) F-70 indoor, water-cooled helium compressors and all related gas lines and power cables.

Like other cryocooler systems from SHI, the CH-160D3 offers users high quality and proven reliability, along with a global sales, service and support network.

## Features

The CH-160D3 combines the best features of SHI's CH and RDK Cryocoolers series, including:

- Displex® pneumatic drive technology to limit the number of wear parts in the refrigerator
- Upgraded Whisper® technology for quieter operation
- Updated gas-balanced valve design to reduce torque as well as wear and tear
- New stem drive design improves efficiency and increases maintenance interval
- Novel heat exchanger designed to increase efficiency
- CE and RoHS compliance

## Performance Specifications

| Power Supply                       | 50 Hz                              | 60 Hz        |
|------------------------------------|------------------------------------|--------------|
| 1st Stage Capacity                 | 600 W @ 77 K                       | 725 W @ 77 K |
| Minimum Temperature <sup>1</sup>   | <30 K                              |              |
| Cooldown Time to 77 K <sup>1</sup> | <20 Minutes                        |              |
| Weight                             | 31.8 kg (70 lbs.)                  |              |
| Dimensions (HxD) <sup>2</sup>      | 530 x ø241 mm<br>(20.9 x ø9.5 in.) |              |
| Maintenance                        | 13,000 Hours                       |              |
| Regulatory Compliance              | CE, RoHS                           |              |

<sup>1</sup> Lowest temperature and cooldown time are for reference only.

<sup>2</sup> With standard flat warm flange. (Available in other warm flange interfaces.)

Specifications subject to change without notice.

