



Ideas for you!



DC Inverter
Cooler Unit

HIGH ACCURACY $\pm 0.1^{\circ}\text{C}$ | INTELLIGENT CONTROL | GREEN COOLER

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DC INVERTER COOLER UNIT

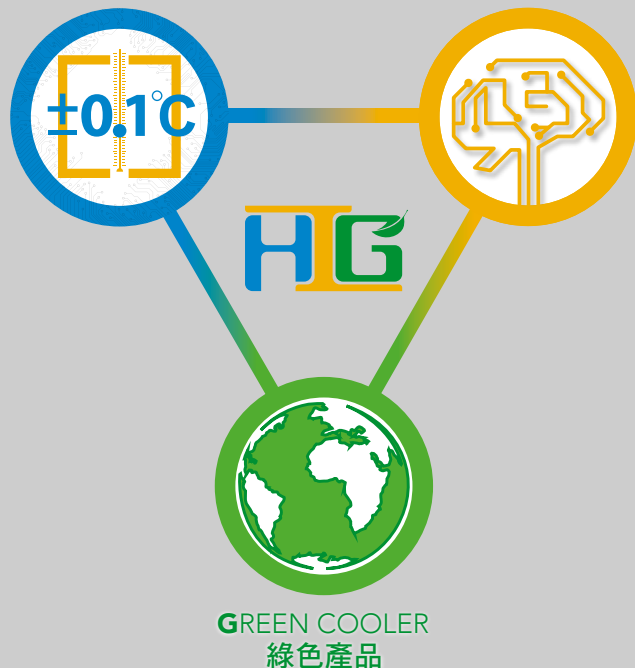
油冷卻機 Oil Cooler							
項目 Item	機型 Model	HBO-N250PS	HBO-N400PS	HBO-N600PS	HBO-N750PS	HBO-N900PS	HBO-N1000PS
冷卻能力 Cooling Capacity	KCAL/H	0~1000	0~1500	0~2100	0~3000	0~3800	0~4500
	W	0~1170	0~1750	0~2450	0~3500	0~4400	0~5250
	BTU/H	0~4000	0~6000	0~8400	0~12000	0~15200	0~18000
溫度控制 Temperature Control	A	固定型 (設定範圍10~40°C) Fixed Temp. Control (Set value 10~40°C)					
	B	差溫型 (室溫/機體溫度追蹤型, 設定範圍-9.9~+9.9°C) Differential Temp. Control (Tracking ambient or machine body temp., set value -9.9~+9.9°C)					
使用範圍 Working Range	室溫°C Ambient Temperature °C	10~40°C					
	油溫°C Liquid Temperature °C	10~45°C					
電源 Power Rating		3φ200~230V 50/60Hz					
控制精度 Control Precision		±0.1°C					
冷媒控制方式 Refrigerant Control Method		直流變頻壓縮機+電子式膨脹閥+比例式控制閥 DC Inverter Compressor+Electronic Expansion Valve+Proportional Valve					
水冷卻機-立式含水箱 Water Cooler with Tank							
項目 Item	機型 Model	HWK-N250PTS	HWK-N400PTS	HWK-N600PTS	HWK-N750PTS	HWK-N900PTS	HWK-N1000PTS
冷卻能力 Cooling Capacity	KCAL/H	0~1000	0~1500	0~2100	0~3000	0~3800	0~4500
	W	0~1170	0~1750	0~2450	0~3500	0~4400	0~5250
	BTU/H	0~4000	0~6000	0~8400	0~12000	0~15200	0~18000
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控制精度 Control Precision		±0.1°C					
冷媒控制方式 Refrigerant Control Method		直流變頻壓縮機+電子式膨脹閥+比例式控制閥 DC Inverter Compressor+Electronic Expansion Valve+Proportional Valve					
水冷卻機-立式不含水箱 Water Cooler without Tank							
項目 Item	機型 Model	HWV-N250PS	HWV-N400PS	HWV-N600PS	HWV-N750PS	HWV-N900PS	HWV-N1000PS
冷卻能力 Cooling Capacity	KCAL/H	0~1000	0~1500	0~2100	0~3000	0~3800	0~4500
	W	0~1170	0~1750	0~2450	0~3500	0~4400	0~5250
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冷媒控制方式 Refrigerant Control Method		直流變頻壓縮機+電子式膨脹閥+比例式控制閥 DC Inverter Compressor+Electronic Expansion Valve+Proportional Valve					

Ideas for you!

一直是哈伯對產品創新設計的初心，
because we never forget why we start innovation
and design of HAVOR products,

HIGH ACCURACY $\pm 0.1^{\circ}\text{C}$
高精度恆溫控制

INTELLIGENT CONTROL
智慧控制

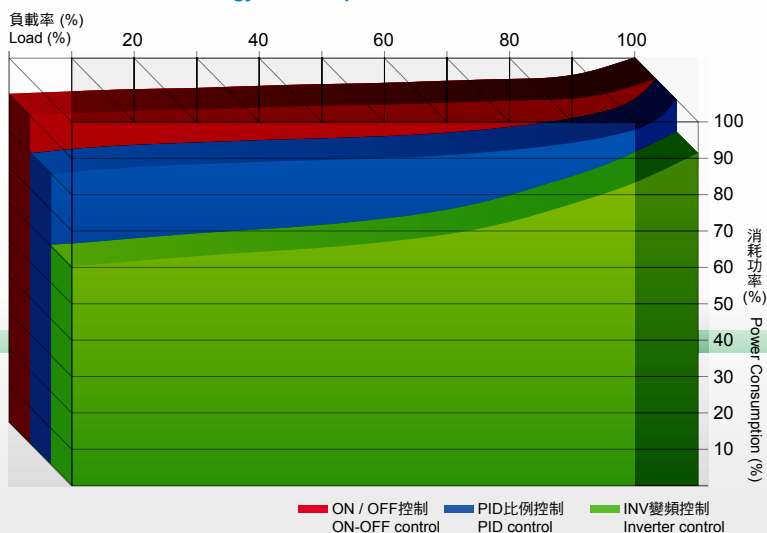


為您，我們提供最優化效能與功能的高精度恆溫冷卻設備。
為您，我們創新智慧控制，邁向工業4.0智能化設備與智慧製造之需求。
為您，我們永遠不會忽視對環境和社會的責任，堅持友善地球之綠色產品。
哈伯HIG，一切為您。

For you, we offer high-precision, constant-temperature control cooling unit that optimizes performance and functionality to the application.
For you, we offer intelligent control to be a part of smart machine and smart manufacturing which is going forward Industrial 4.0.
For you, we will never lose responsibility for environment-friendly and insist green products to protect earth.
HIG, created by Habor, always for you.

控制方式和能耗比較圖

Control Method & Energy Consumption Chart



產品特色及優勢

Features and advantages

- | | | |
|--|--------------------------------------|--|
| | 快速高精度(0.1°C)溫度補償技術 | Quick temperature compensation for high accuracy $\pm 0.1^{\circ}\text{C}$ control |
| | 採用最新IPM磁石之DC變頻壓縮機馬達 | DC inverter compressor motor with the latest IPM magnet |
| | 遠端設定及監控 | Remote setting and monitoring |
| | 節能智慧管理 | Energy-level management |
| | 預知保養，壽命檢知 | Predictive maintenance & working life detection |
| | 多SENSOR功能 | Multi-Sensor monitoring and detection |
| | 乙太網通信功能 | Ethernet communication protocol |
| | 冷媒地球暖化潛勢指數(GWP)，降低68%(R32相較於R410A冷媒) | Refrigerant Global Warming Potential (GWP) is decreased by 68% (R32 compared to R410A) |
| | 採用微通道冷凝器，相較於銅管鑄片式，降低冷媒填充量30%~50% | Use of Micro-channel condenser can reduce the refrigerant filling amount by 30%~50% compared to copper tub & fin condenser |
| | 採DC風扇馬達提昇節能效率 | Use DC fan motor to improve energy efficiency |
| | 模組化變頻控制器設計，方便服務 | Easy service by modularized inverter control unit |
| | 體積縮小，減少冷卻機佔地空間 | Compact size can reduce the space occupied by cooler unit |

主要產品系列 MAIN PRODUCTS SERIES

- 工具機專用油冷卻機系列
Oil cooler series specific for high speed spindle, linear motor, ball screws, hydraulic unit and other parts of machine tools
- 放電加工機專用油冷卻機系列
Oil cooler series specific for E.D.M.
- 線切割加工機、印刷機、雷射加工切割機、專用精密溫度控制循環式水冷卻機系列
High accuracy temperature control water specified for machine tools, wire cut E.D.M., printing machine & laser cutting machine
- NC控制箱、電機、電力箱密閉式防塵、防溼、冷卻專用熱交換冷卻機系列
Dust-proof, ash-proof enclosed heat exchanger series specific for NC control cabinet, & electric power cabinet etc.
- NC控制箱密閉式空調冷卻機系列
Enclosed air conditioner series for NC control cabinet
- 油壓箱冷卻專用熱管熱交換器
Heat pipe heat exchanger for oil cooling



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