# Unicla ODrive





### Here to help. Since 1964.

Unicla is an established and respected name in mobile equipment compressor design and manufacture. The company was established in Japan in 1964 by innovative industrialist and mobile air-conditioning pioneer, Mr Tetsuo Nobata.

Today we are jointly owned by the Yee and Mitchell families with our headquarters in Hong Kong, Research and Development in Brisbane, Australia, and first class production in Southern China.

Thanks to our world-class engineering capabilities, and thousands of hours of abusive testing in extreme ambient conditions, we provide solutions that ensure reliability, efficiency, long-life and industry-leading "up-time".

At Unicla, we value partnerships first. Mr Nobata's enthusiasm for working collaboratively with industry remains in our DNA. These partnerships have allowed Unicla to become the global company it is today, with a strong presence in Europe and Asia, including a world-class environmental test centre in Australia. In addition to broadly serving the aftermarket industry, our history has seen us appointed as official supplier to many OE manufacturers.

We would be delighted if you consider Unicla as your compressor partner.

### Contents

Here to help	2
Contents	3
Driven by reliability	4
A Group (45 to 170 Series)	5
B Group (200 to 660 Series)	8
UA Group	9
F Group (Transport Refrigeration)1	1
Unicla Oil Separators	3

#### Copyright © 2023 All rights reserved

No part of this document shall be reproduced in whole or in part without the permission of Unicla International Limited. This includes reproduction or copies in any form or by any means including photocopying, printing or electronic media.

#### IMPORTANT DISCLAIMER

This is a guideline document containing professional information using representative graphs, charts and tables. Manufacturers' specifications must be consulted for specific guidelines and performance data. Unicla published data, specific to all models, is available in promotional literature and from Unicla International Limited on request or through your Unicla supplier.

Unicla International Ltd expressly disclaims all and any liability and responsibility to any person or business as a result of any actions taken on the basis of information in this publication.



Scan the QR Code or visit our website at unicla.hk/products/odrive for more information

### **Driven by reliability.** The compressor only Unicla can build.

"Industrial, perfect for commercial vehicle applications, heavy duty, robust." These are terms used by loyal Unicla customers to describe the features and benefits of our swash plate compressor design.

Our compressor design is a combination of tangible design features, including a forged steel cylinder housing and a rigid, thermally superior, one piece outer case. We refuse to compromise quality by chasing minor cost savings.

In addition to our tangible features, we provide intangible benefits, such as world leading customer service and after-sales technical support. These factors allow us to meet or exceed expectations for class leading uptime and lowest in class life cycle cost.

These tangible and intangible features are the cornerstone of the Unicla philosophy, which values relationships, loyalty, and handshake agreements in the business world. We truly believe that our partners deserve nothing less. Please consider Unicla for your compressor needs as we would be honoured to work with you.



### A Group 45 to 170 Series

Superior system performance and efficiency can only be achieved by the highest degree of individual component matching. Unicla understand this and have engineered a range of capacities to meet the needs of system designers, application integrators, and in-field service technicians. The 45 to 170 Series includes a broad range of compressors from 46cc to 172cc swept capacity. The range offers diverse compressor body mounting options including alternator-type mount, ear or lug mount, and direct or through-bolt mount models. In addition, an extensive range of clutch and rear cap options ensure Unicla have the solution you require.

This Unicla compressor series features our unique 10-cylinder swashplate design that is precisely mated to a seperate steel piston block, all housed in a one-piece thermally efficient outer body casing. High-speed Japanese bearings and Class-A Japanese o-rings are used across this series. Quiet and smooth, these high-performers offer great reliability, long life, and category-leading Life-Cycle Costing (LCC).

The 45 to 170 Series feature in a diverse range of mobile applications. They are ideally suited to the high-performance, light commercial, heavy-duty, agriculture and construction markets. For system integrators and Original Equipment Manufacturers (OEMs), the Unicla 45 to 170 Series can be specified with application-unique mounting configurations, ensuring a secure aftermarket opportunity.

Unicla A Group - light weight, heavy duty.

# Unicla 🕲 oDrive

- 46cc to 172cc capacity
- 10-cylinder swashplate design
- One-piece body
- Configuration options
- OE industrial grade



Scan the QR Code to browse the complete Unicla oDrive range



### **B Group** 200 to 660 Series

When it comes to serious industrial applications, our B Group compressors have no competition.

It starts with our versatile 200cc range, which utilises our UX mount to enable you to secure your aftermarket, a critical consideration for most OEMs and system integrators. Versions with TM21 (UM) mounting configurations are also available for replacement of Valeo and Que compressors. We then expand the range to 330cc and 380cc which can be ordered to interchange with TM31 (UM), 10P30B (UN), and 10P30C (UNX) or as with the 200cc models our unique UX mount.

When you need capacity to drive large HVAC systems in harsh environmental conditions, our UWX 440 (508cc) UWX 550 (607cc) and UWX660 (675cc) models represent a great value proposition. Unicla was the first to build a 14 cylinder swash plate compressor, which introduced the positive pressure oil pump to ensure all important lubrication was maintained at all operating parameters.

You can depend on Unicla B Group's super smooth, unmatched volumetric efficiency to satisfy your customer's need for long life, low noise and ultimate performance. Reduce your customer's LCC with Unicla B Group compressors.

Unicla B Group - Our unfair advantage.



# Unicla 🕲 oDrive

- OE replacement
- Plug and play
- Over 600 applications
- Unicla support
- Global opportunity



Scan the QR Code to browse the complete Unicla oDrive range

# **UA Group** At last, a Unicla for everybody.

The release of our vehicle-specific UA Group provides an OE replacement solution for over 600 common automotive models.

Given our heritage is at stake, we have taken our time to get this right. Rather than rushing into this market, we needed to be sure that our range would be worthy of the Unicla name.

It was vital that our partners could confidently depend on Unicla for their OE replacement compressor requirements. Our traditional value proposition of superior quality, first-class technical and after-sales support, and partner loyalty are all part of UA Group.

Unicla UA Group offers you tremendous opportunity. In addition to providing access to the widest OE replacement range, we offer our partners valuable market territories and factory support for years to come.

Welcome to the Unicla family.



# **Transport Refrigeration**

#### Refrigeration systems are special. So is our F Group.

The demands of low-temperature refrigeration systems require robust engineering and high-tolerance manufacturing. These characteristics are at the very core of every F Group compressor, ensuring performance you can count on. Unlike many other compressors, the Unicla F Group is built specifically for use in low-temperature refrigeration systems, which use high-compression refrigerants such as R404a and R452a.

Our unique working assembly is at the heart of every F Group compressor, mated to strengthened valve plates and reed valves, with internal components tolerance matched, hand-lapped and polished to perfection. F Group features upgraded seals and high-grade POE oils to ensure your refrigeration system can deliver its payload reliably and on time.

The Unicla F Group compressors are available in all capacities from 46cc to 675c with a wide range of clutch and rear cap options to suit your requirements.

# Unicla 🕲 oDrive

- 46cc to 675cc capacity
- Refrigeration ready
- Configuration options
- Exacting tolerances
- Hand-finished internals



Scan the QR Code to browse the complete Unicla oDrive range



### Unicla Oil Separators A must-have accessory.

Refrigeration oil is the lifeblood of all air-conditioning and refrigeration systems. Compressors rely on the formation of an oil film to provide vital protection for internal moving parts. Ensuring sufficient compressor lubrication under diverse operating conditions is paramount.

Our extensive testing has shown that oil migration is a major reason for compressor failure. Installing an oil separator can prevent this, which makes it a vital component in any large capacity or long hose run HVACR system.

Unicla Oil Separators will improve system reliability, extend compressor "up-time", increase cooling performance, and reduce your customer's LCC regardless of the compressor brand or type.

Unicla Oil Separators - there is no better way to guarantee the life of a compressor.



# Unicla 🕲 oDrive

#### Oil Separator kits include:

- High-performance oil separator
- Mounting bracket
- Compressor oil-return port
  - to suit Unicla and Sanden
- Oil return line

#### Available in two sizes:

- A-type kit
  - to suit 45cc-200cc compressor capacities

#### • B-type kit

 to suit 200cc-400cc compressor capacities



Scan the QR Code for more information about Oil Separators

# Unicla 🙆 oDrive

### The compressor only Unicla makes. For over 5 decades.

#### **HEAD OFFICE**

Unicla International Limited Unit 1109, 11/F, Manhattan Centre, 8 Kwai Cheong Road, Kwai Chung, N.I., Hong Kong PHONE: +852 2422 0180 FAX: +852 2422 0680 EMAIL: sales@unicla.hk www.unicla.hk

#### **Unicla Australia**

14 Motorway Circuit Ormeau, Queensland 4208 Australia PHONE: +61 7 5549 4033 FAX: +61 7 5549 4044 EMAIL: sales@unicla.hk www.unicla.hk