



ENGEL AC/DC 12 Volt Portable Fridge-Freezers

The secret of Engel's performance, efficiency and durability is the unique and patented **Swing Motor** compressor. The motor design and associated resonance characteristics achieve a very high power output. Since there is only one moving part, which is self lubricated - no maintenance is needed.

This offers advantages such as great economy, compact size, light weight, high efficiency due to the resonance phenomena, low friction losses and minimum power consumption. When combined with Engel's range of thermally efficient insulation, the result is a superior cooling performance.

Unique to Engel this purpose built compressor is designed to be a portable refrigeration compressor and is one of the key reasons why ENGEL is 'A LEGEND IN RELIABILITY'.

What is the first rule in engineering? -
Keep it simple!

The Sawafuji Swing Motor is a true reciprocating compressor; it has only one moving part. It doesn't get any simpler. The piston is connected to an electro dynamic device which is powered by the use of magnetic fields. With this technology there is no need for bearings, cranks or con-rods, so less moving parts means less chance of failure. With only one moving part there is a very low friction loss which means this is a highly efficient compressor.

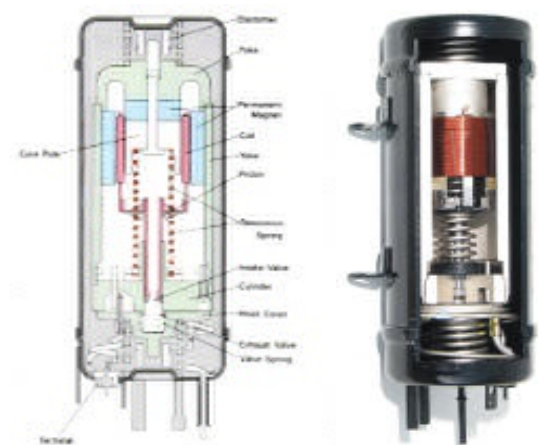
It has no high start up current draw because when it starts up it can simply move down just a fraction then return. Then it slowly increases the distance the piston travels each stroke until it reaches a full stroke. The Sawafuji Swing Motor does not need to perform a full stroke on start up unlike many rotary type compressors that must perform a complete cycle and need much more current to start.

Because this is purpose built and designed to be a portable refrigerator compressor it has to be engineered to take the harshest of mobile and high vibration conditions.

The Sawafuji Swing Motor is located inside the compressor casing with pins locating in rubber bushes then suspended in between shock absorbent springs. It operates at 30 degrees angles and on rough corrugated dirt roads without losing efficiency.

Engel Swing Compressor

One of Engel's outstanding features is the Engel Swing Motor. The patented Swing Motor, developed and manufactured in Japan, is an electro-dynamic reciprocating device that connects directly to the piston of the compressor.



Technical Specifications							
	MRFD-015 / MHFD-015	MT17	MT27	MT35	MT45	MT60	MT80
Power consumption	0.9 - 3.9 Amps*	0.5 - 2.3 Amps*	0.5 - 2.3 Amps*	0.7 - 2.5 Amps*	0.7 - 2.5 Amps*	1.4 - 3.6 Amps*	1.4 - 3.6 Amps*
Volume	14 qt.	16 qt.	22 qt.	34 qt.	43 qt.	64 qt.	84 qt.
Weight	23.5 lbs	35 lbs	35.3 lbs	46.3 lbs.	52.9 lbs.	68.3 lbs.	86 lbs.
Inside Dims	13.75"x 7.5"x7.5"	11.5" x 8" x 10"	7.9"x11.4" x13.6"	15.4"x 10.8x12.4"	15.4"x 10.8x16.4"	20.1" x 14.9x12.4"	20.1" x 14.9" x 16.7"
Outside Dims	17"x11" x 14.5"	21.2" x 12" x 14.2"	21.2"x12" x 18.2"	25.5" x 14.3" x 16"	25.5" x14.3" x 20"	31.1" x 19.3" x 17.4"	31.1" x 19.3" x 21.7"
Freezing Ability	From 45°F to 0°F	From 45°F to below 0°F	From 45°F to below 0°F	From 45° to below 0°F	From 45° to below 0°F	From 45° to below 0°F	From 45° to below 0°F
Temp. control	Variable Thermostat	Variable Thermostat	Variable Thermostat	Variable Thermostat	Variable Thermostat	Variable Thermostat	Variable Thermostat
Exterior material	ABS Plastic	ABS Plastic	ABS Plastic	Powder coated steel	Powder coated steel	Powder coated steel	Powder coated steel
Available colors	2 Tone Gray	2 Tone Gray	2 Tone Gray	2 Tone Gray	2 Tone Gray	2 Tone Gray	2 Tone Gray
Refrigerant Gas	CFC free - 134A	CFC free - 134A	CFC free - 134A	CFC free - 134A	CFC free - 134A	CFC free - 134A	CFC free - 134A
Input rating	DC12V - 3.9A	DC12V - 2.5A	DC12V - 2.5A	DC12V - 2.7A	DC12V - 2.7A	DC12V - 4.1A	DC12V - 4.1A
12 V Power Lead	9' detachable	9' detachable	9' detachable	9' detachable	9' detachable	5' pig tail	5' pig tail
Warranty	1 year	2 year	2 year	2 year	2 year	2 year	2 year
Shipping Dims	20"x14" x17"	24"x15" x16"	14" x 23" x19"	29" x 17" x19"	29" x 17" x23"	36" x 24" x20"	36" x 24" x 26"
Shipping Weight	27 lbs	43 lbs	43 lbs	59 lbs	66 lbs	82 lb plus pallet	97 lb plus pallet

* Refrigerator setting (minimum) and freezer setting (maximum - running continuously)

