

# **ACS 511 and ACS 611:** Completely automated air conditioning service units

The ACS 611 is one of the most advanced air conditioning service units for cars and trucks. Like all completely automated Bosch units, it is designed to carry out the maintenance of R-134a-based air conditioning systems with a minimum of manual intervention. The unit automatically controls every phase of maintenance, including oil and coolant recovery, recycling and refilling without needing direct intervention from a technician. However, the manual mode allows the user to control all aspects individually if so desired. The powerful, two-phase vacuum pump of the ACS 611

assures quick and effective evacuation of the system and, as with all Bosch units, it comes equipped with a data base to provide the necessary oil and coolant quantities for the vehicle's air conditioner. The ACS 611 also has an integrated printer to create detailed reports. As an alternative for garages with low service levels, we offer our ACS 511 model, which has a less powerful compressor yet still meets the requirements for a professional A/C service and without any compromise to the high quality one expects from Bosch units.

#### **Dual operational mode:**

- ▶ Quick access or detail mode possible
- Automated management of recovery and recycling
- ► Manual or automated use
- ► Multi-phase recycling
- ► Programmable vacuum phase
- ► Automated re-filling
- ► Integrated, guided pressure test for the system
- ► Automated oil recovery and filling
- ► Automated UV dye injection
- ► Automated removal of non-condensable gasses
- ▶ Programmable maintenance
- ► Multi-lingual software
- ► Intelligent filling quantity control
- ► Integrated flushing program
- ► Data transfer with Smart Key

#### Order number:

ACS 611: S P00 000 002 ACS 511: S P00 000 001





Professional air conditioning service guarantees quick and precise maintenance.

### **ACS 511 and ACS 611**

## Technical data, Primary functions

Refrigerant R-134a R-134a   Unit for recovery, Recycling and refilling Completely automated Completely automated   Flushing kit Optional kit Optional kit Optional kit   Electronic database Standard Standard   AC performance teat Yes Yes   Electricity supply 230 Y 50/60 Hz 320 Y 50/60 Hz   CE mark Yes Yes   SAE J2788 standard — —   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated oil finjection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LOD display with background lighting Yes / 80 digits Yes / 80 digits   Very guide Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min		ACS 611	ACS 511
Plushing kit	Refrigerant	R-134a	R-134a
Electronic database Standard Standard   AC performance test Yes Yes   Electricity supply 230 V 50/60 Hz 230 V 50/60 Hz   CE mark Yes Yes   SAE J2788 standard — —   Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated oil Injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Bo mm class 1 80 mm class 1 80 mm class 1 80 mm class 1 20 mm class 1 180 mm class 1	Unit for recovery, Recycling and refilling	Completely automated	Completely automated
AC performance test Yes Yes   Electricity supply 230 V 50/60 Hz 230 V 50/60 Hz   CE mark Yes Yes   SAE J2788 standard — —   Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated UV dye Injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/-5 g +/-5 g   Oil bottle 2x 250 ml 2x 250 ml	Flushing kit	Optional kit	Optional kit
Electricity supply 230 V 50/60 Hz 230 V 50/60 Hz   CE mark Yes Yes   SAE J2788 standard — —   Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated UV dye Injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc	Electronic database	Standard	Standard
CE mark Yes Yes   SAE J2788 standard — —   Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated Oil injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 3	AC performance test	Yes	Yes
SAE J2788 standard - -   Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated oil injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automa	Electricity supply	230 V 50/60 Hz	230 V 50/60 Hz
Manual processing mode Yes Yes   Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°	CE mark	Yes	Yes
Automated leak test Yes Yes   Automated oil drain With electronic scales With electronic scales   Automated oil injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +1	SAE J2788 standard	_	_
Automated oil drain With electronic scales With electronic scales   Automated oil injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity	Manual processing mode	Yes	Yes
Automated oil injection With electronic scales With electronic scales   Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 6	Automated leak test	Yes	Yes
Automated UV dye injection Yes Yes   Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 6	Automated oil drain	With electronic scales	With electronic scales
Manometer 80 mm class 1 80 mm class 1   Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Automated oil injection	With electronic scales	With electronic scales
Tank manometer 40 mm 40 mm   Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Automated UV dye injection	Yes	Yes
Service hoses 244 cm / SAE J2196 244 cm / SAE J2196   LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660 1270 × 690 × 660	Manometer	80 mm class 1	80 mm class 1
LCD display with background lighting Yes / 80 digits Yes / 80 digits   User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Tank manometer	40 mm	40 mm
User guide 20 languages 20 languages   Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Service hoses	244 cm / SAE J2196	244 cm / SAE J2196
Printer Yes Yes   Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	LCD display with background lighting	Yes / 80 digits	Yes / 80 digits
Hermetic high performance compressor 1/3 HP 1/4 HP   Vacuum pump 170 I/min 70 I/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	User guide	20 languages	20 languages
Vacuum pump 170 l/min 70 l/min   Internal supply tank 20 kg 8 kg   Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Printer	Yes	Yes
Internal supply tank 20 kg 8 kg   Precision of the scales +/− 5 g +/− 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C − 50°C +10°C − 50°C   Humidity 20 − 75% 20 − 75%   Transport and storage temperature -25°C − 60°C -25°C − 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Hermetic high performance compressor	1/3 HP	1/4 HP
Precision of the scales +/- 5 g +/- 5 g   Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Vacuum pump	170 l/min	70 l/min
Oil bottle 2x 250 ml 2x 250 ml   High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Internal supply tank	20 kg	8 kg
High performance dry filter 710 cc 300 cc   Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Precision of the scales	+/- 5 g	+/- 5 g
Recycling multi-pass Automatic Automatic   Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature -25°C - 60°C -25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Oil bottle	2x 250 ml	2x 250 ml
Power 800 W 550 W   Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	High performance dry filter	710 cc	300 cc
Working temperature +10°C - 50°C +10°C - 50°C   Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Recycling multi-pass	Automatic	Automatic
Humidity 20 - 75% 20 - 75%   Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Power	800 W	550 W
Transport and storage temperature - 25°C - 60°C - 25°C - 60°C   Dimensions 1270 × 690 × 660 1270 × 690 × 660	Working temperature	+10°C - 50°C	+10°C - 50°C
Dimensions 1270 × 690 × 660 1270 × 690 × 660	Humidity	20 – 75%	20 – 75%
	Transport and storage temperature	- 25°C - 60°C	- 25°C - 60°C
Weight 120 kg approx. with empty tank 90 kg approx. with empty tank	Dimensions	1270 × 690 × 660	1270 × 690 × 660
	Weight	120 kg approx. with empty tank	90 kg approx. with empty tank