

Adaptive ground drive AGD

Application software for multi wheeled vehicles



Self-propelled agricultural machines with hydrostatic multi-motor drives must meet ever stricter requirements. Operators want their machines to have more and more functions to ensure the necessary machine performance and the productivity that goes along with that. At the same time, a high level of safety must be met in software development. This increases enormously the complexity of developing the software for a single agricultural machine. With Adaptive ground drive AGD, Bosch Rexroth therefore offers application software that incorporates decades of application know-how, while taking safety requirements into account. Combined with Rexroth RC/40, the new generation of BODAS control units, complex functions for individual mobile agricultural machines can be adapted easily and flexibly.

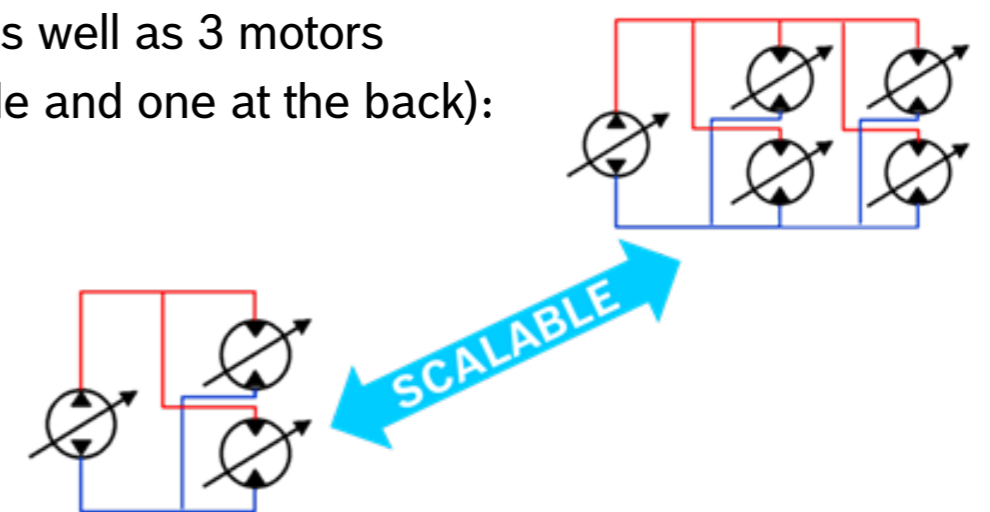
CUSTOMER BENEFITS

- A wide range of functions for multi-motor drives, in ENTRY and PREMIUM versions
- Can be used for the latest control unit generation: BODAS RC/40
- Suitable for strict safety requirements according to ISO 25119
- Easy to parameterize with ASrun version
- Can be flexibly expanded and customized with ASopen version
- Try It First: Develop your perfect machine solution in 3 steps

FUNCTION AND BENEFITS

Extensive functions for multi-motor drives

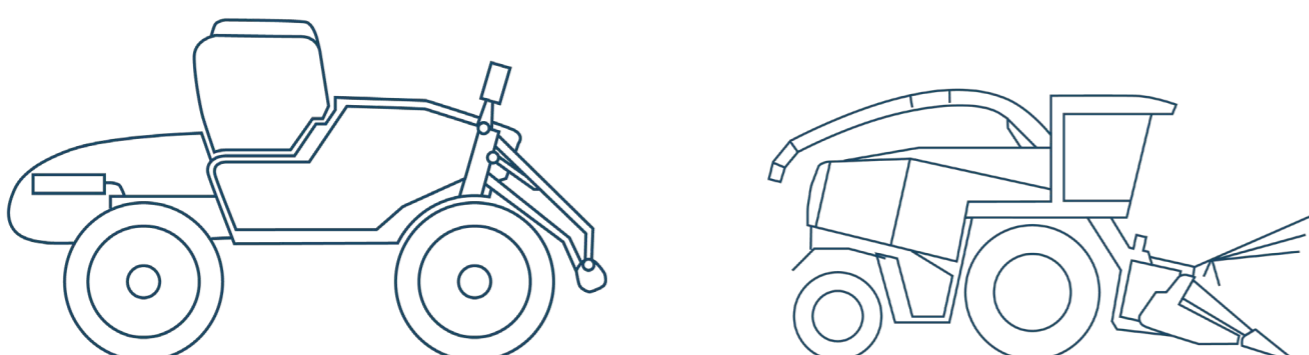
The Rexroth AGD software provides extensive functions for hydrostatic travel drives in self-propelled agricultural machines. This not only allows 4 wheels to be propelled, but also axle-based (one hydraulic motor on the front axle and one on the back axle), as well as 3 motors (two on the front axle and one at the back):



Based on Bosch Rexroth's decades of experience as well as the most advanced technology, Adaptive ground drive AGD maximizes a machine's productivity, while meeting legal regulations relating to hydrostatic brake requirements at the same time.

In its ENTRY version, the software contains all basic functions needed to operate the agricultural machine safely on the road and to ensure the power needed for working in the field. The PREMIUM version allows the functions, comfort, and performance of the machine to be greatly expanded.

APPLICATIONS



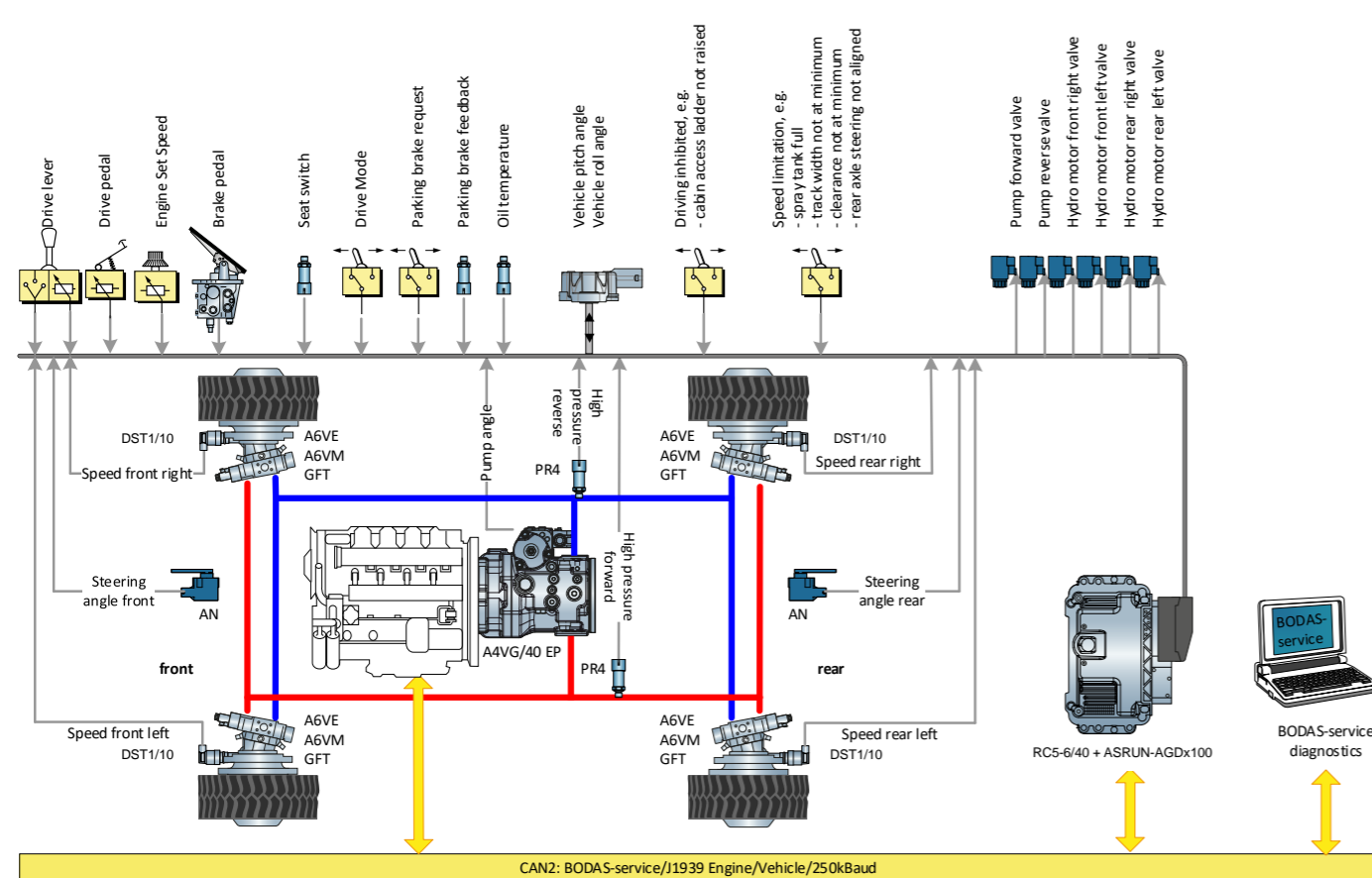
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TECHNICAL DATA

Adaptive ground drive AGD

Internal combustion engines:	CAN SAE J1939
Rexroth control units:	BODAS RC5-6/40 BODAS RC18-12/40
Rexroth sensors:	Pump/combustion engine speed: CAN SAE J1939 Pressure: PR4 SENT for MA and MB; Hydromotor speed: DST (incl. temperature) Angular position of the vehicle: MM7.10 Steering angle: AN Driving level: 4THE
Safety standard:	ISO 25119
ENTRY version:	Basic functions, such as dynamic pressure control, different driving modes and vehicle dynamics, ABS, ASR, diesel overspeed protection, load limit control, etc.
PREMIUM version:	Premium functions, such as HLB, dynamic torque distribution, speed regulation (full drive control), electronic pressure cutoff, etc.
Diagnostic interface:	BODAS service and CAN SAE J1939



Exemplary overall configuration for Adaptive ground drive AGD

Can be used for latest controller generation: BODAS RC/40

The Rexroth AGD application software was developed for use with BODAS control units in series 40 and the sizes RC5-6 and RC18-12, which Bosch Automotive Electronics manufactures according to the high-quality standards of the automotive industry. Proven technology with the latest hardware architecture can be operated economically over the long term.

Suitable for safety requirements according to ISO 25119

The AGD multi-motor application software was developed by Bosch Rexroth in keeping with the ISO 25119 safety standard. Adaptive ground drive AGD therefore provides a tested software that complies with the standard for safety-related applications. For the most part, no additional development work is necessary to meet the standard's requirements. The mobile equipment can be used immediately once the software has been parameterized.

Easy to parameterize with ASrun version

The ASrun version of Adaptive ground drive AGD is being developed on the architecture of a self-propelled agricultural machine. This version of the application software allows the functions to be parameterized to individual machine requirements with little effort. Bosch Rexroth provides extensive instructions as well as experienced commissioning specialists for this purpose.

Can be flexibly expanded and customized with ASopen version

Additional machine-specific functions for the components can be added to the existing functions to meet individual customer requirements: with the open ASopen version of AGD. The ASopen version also gives the possibility to change the machine layout from the standard architectures with one pump and up to four-wheel motors. This means that the wide range of functions can also be used on other self-propelled machines.

Try It First: Develop your perfect machine solution in 3 steps

1. Get easy access: Download Try It First software free of charge.
2. Customize Software: Test and adapt functions according to your needs.
3. Pay only what you decide to use – via credits.

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