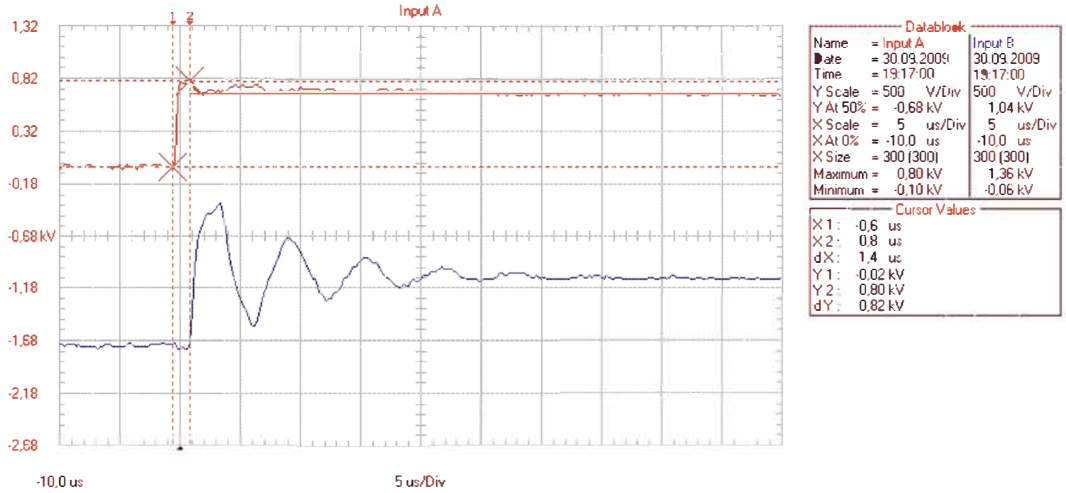
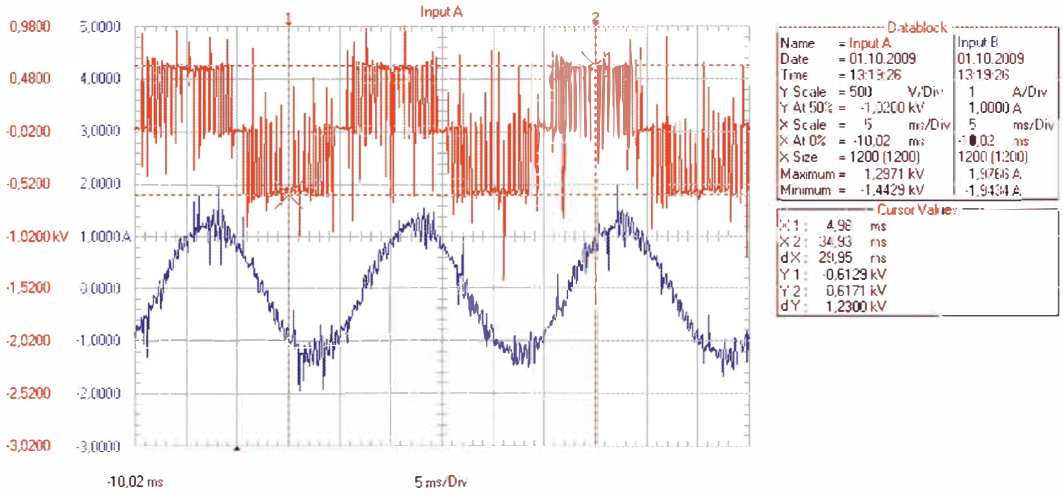
DRIVE SYSTEMS INDUSTRY Catalog

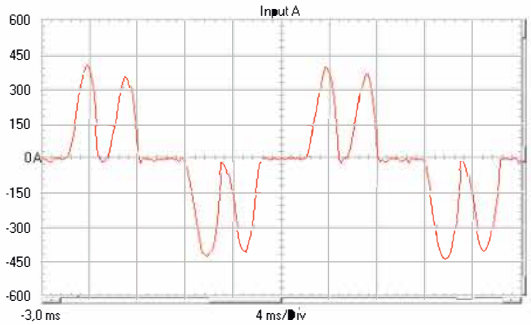
Negative impacts are the output parameters of the inverter and the length of the cable connection which are detrimental to the current and the voltage applied to the motor. This creates a real threat to the insulation of cables and motors, and also accelerates their degradation.



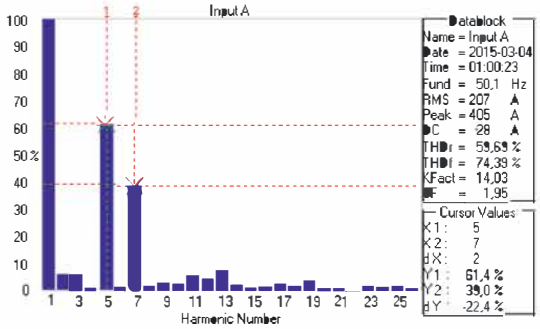
- **Pic. 1.** The shape difference of voltage at the inverter output (upper graph) and at the connections (lower graph).



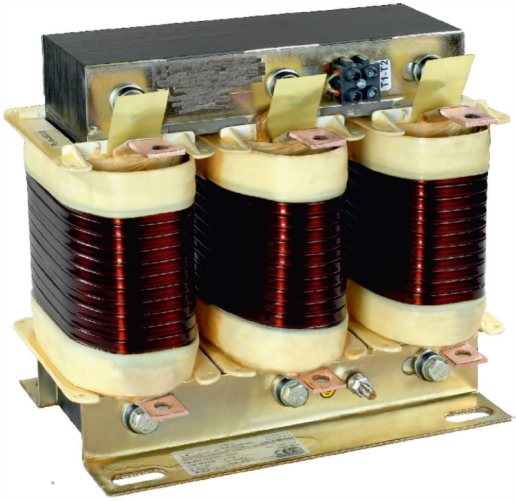
- **Pic. 2.** Voltage waveform (upper graph) and current (lower graph) on motor connections.

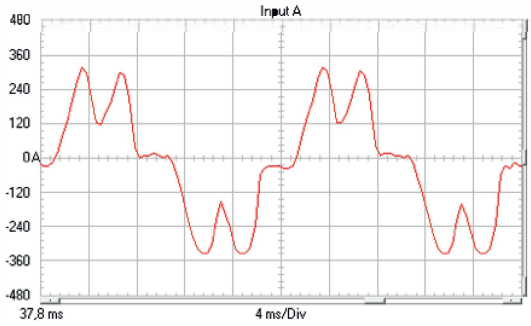


Without the use of



Pic. 3. Waveform and harmonic spectrum of the input current of the inverter without ED3N Line Choke.

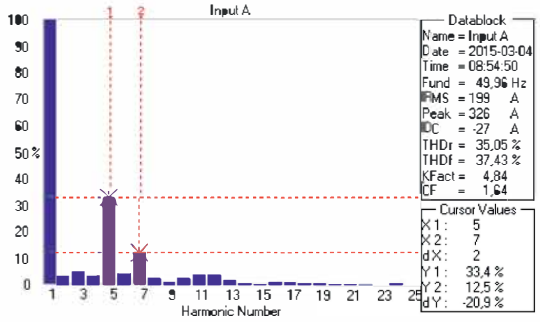




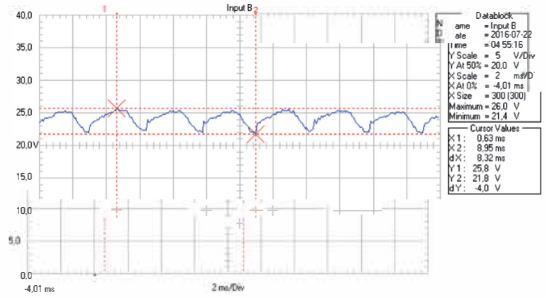
With the use of

Line Choke

ED3N



Pic. 4. Waveform and harmonic spectrum of the input current of the inverter with ED3N Line Choke.



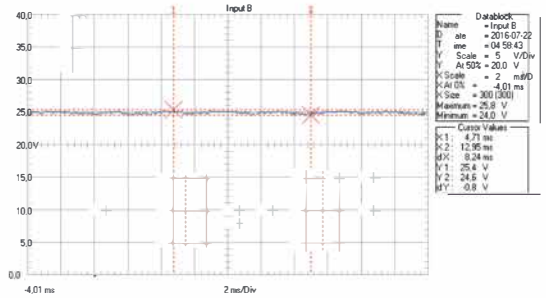
- **Pic. 7.** Current waveform without ED1W Smoothing Choke.

Without the use of

With the use of

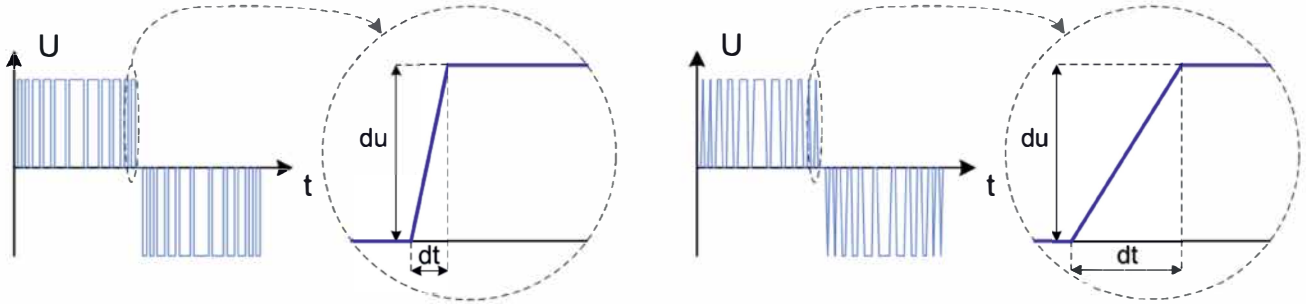
Smoothing Choke

ED1W

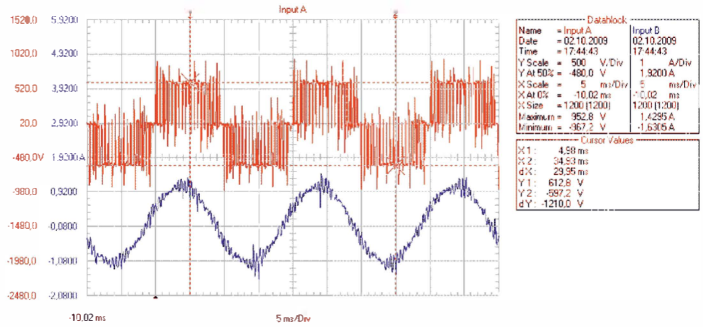


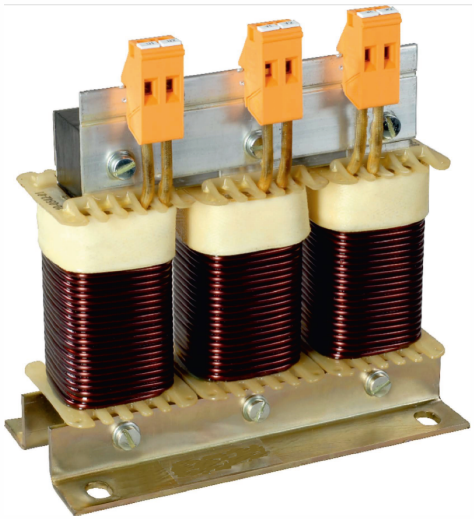
- **Pic. 8**. Current waveform with ED1W Smoothing Choke.

- Without the use of ED3dU Limiting Choke → With the use of ED3dU Limiting Choke

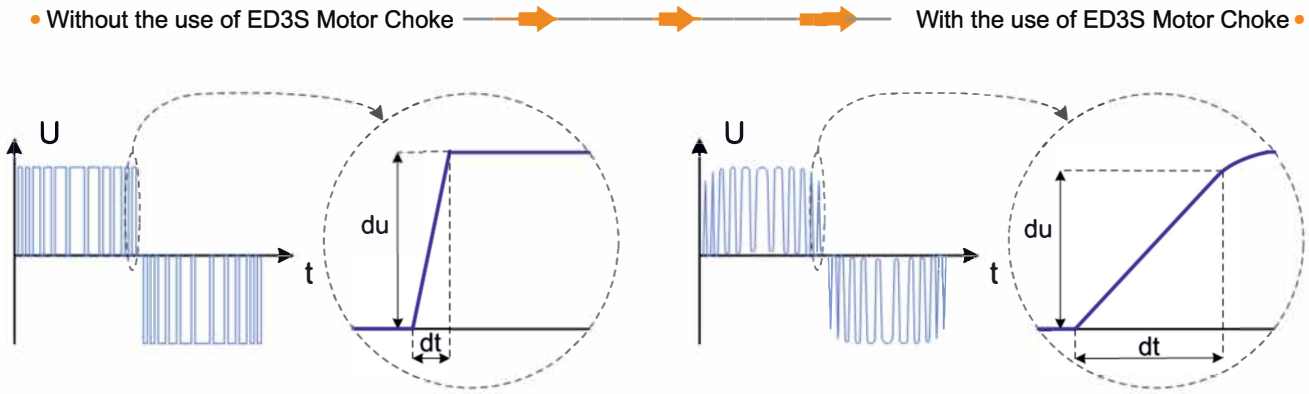


- **Pic. 9.** Theoretical voltage slew rate with and without du/dt ED3dU Limiting Choke.

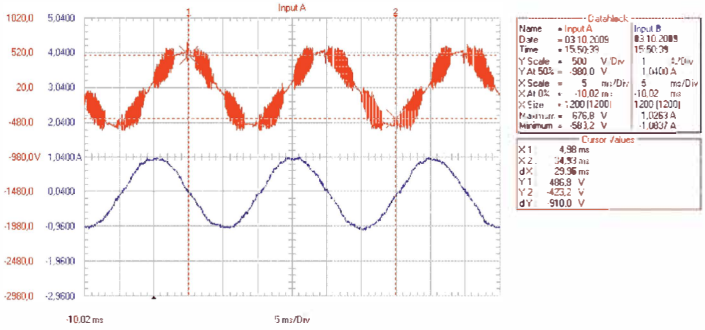


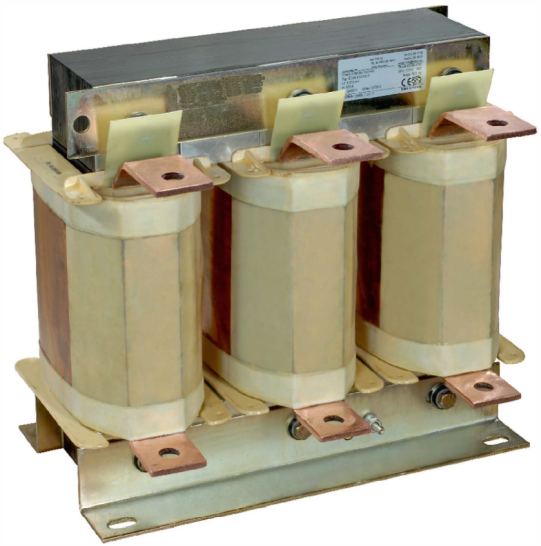


- **Pic. 10.** Voltage waveform (upper graph) and current (lower graph) at the motor terminals with du/dt ED3dU Limiting Choke.

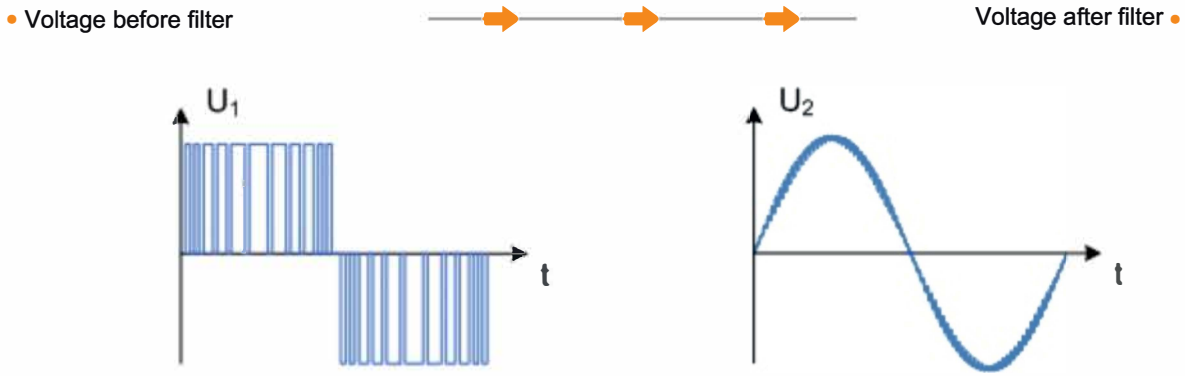


Pic. 11. Theoretical voltage slew rate with and without ED3S Motor Choke.

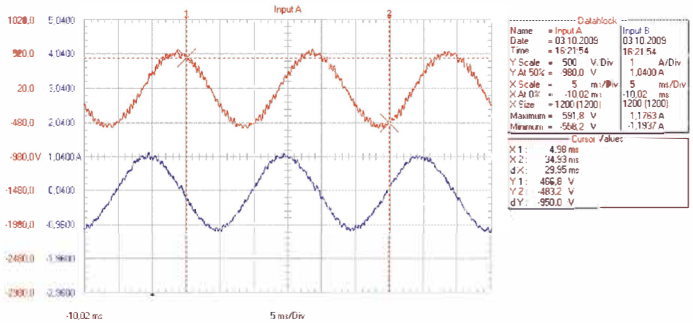


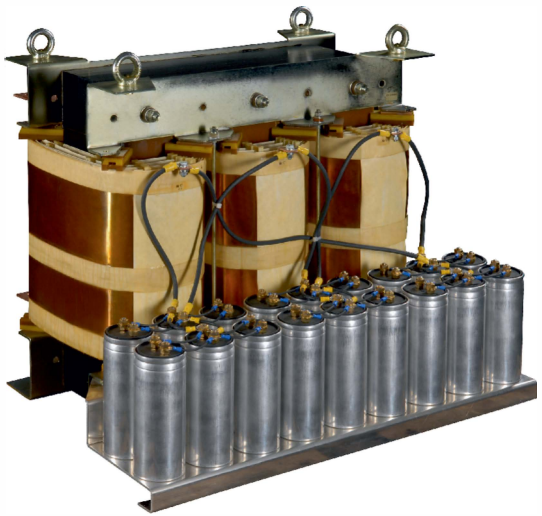


Pic. 12. Voltage waveform (upper graph) and current waveform (lower graph) at the motor terminals with ED3S Motor Choke.



Pic. 13. The theoretical course of output voltage of the inverter U_1 and at the motor terminals of U_2 after applying EF3LC Sine Wave Filter.





Pic. 14. Voltage waveform (upper graph) and current (lower graph) at the motor terminals with EF3LC Sine Wave Filter.

Ask us how we can help you.