

## PRESENTATION

The **APC** (Angular Pulse Converter) generates the synchronization signals that are typically found on the different components of a motor. It also provides the necessary signals for the measurement devices of an injection test bench (EFS8244, EFS8246...).

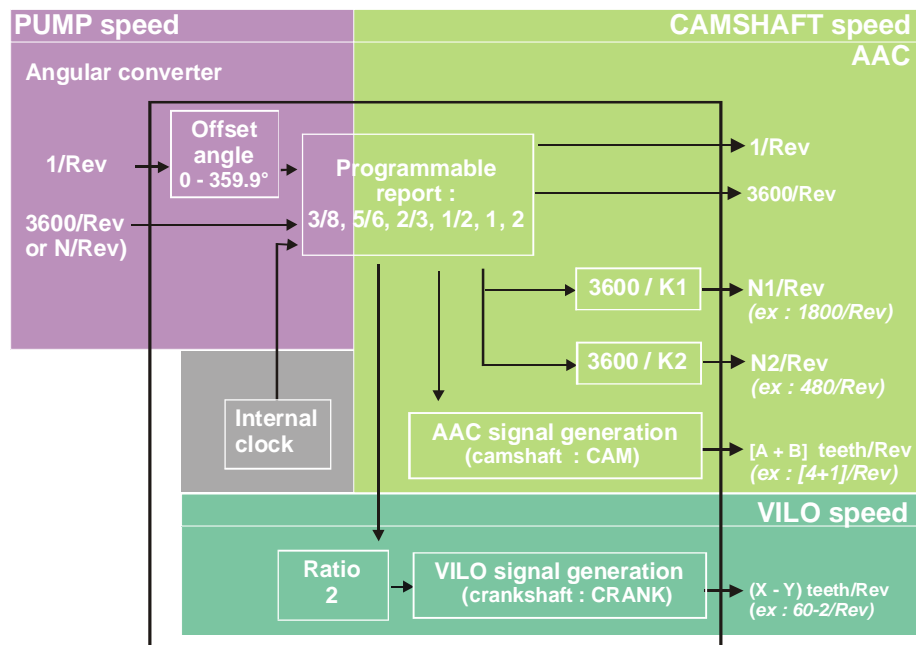


## ADVANTAGES

- Wide range of generated signals
- Fully programmable output signals
- Digital phase loop allowing an extended range of the conversion ratio

## OPERATING PRINCIPLE

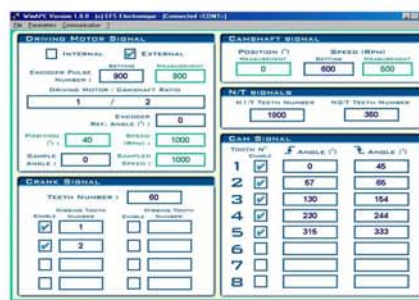
From external angular encoder signals (or from its internal clock), the **APC** generates synchronization signals according to user parameters.



## PRINCIPAL FUNCTIONS

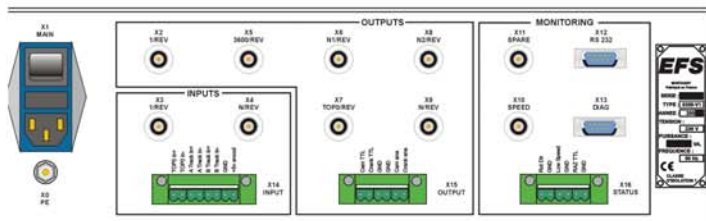
- Digital phase loop on the input converter
- Programmable divisions of the input signal frequency
- Generation of motor synchronization signals : crank, cam ...
- Emulation of incremental converter signals
- Independent mode for the internal clock

winAPC is the configuration software for the APC module. This software runs under Windows98, Windows2000, WindowsXP and uses an RS232 connection.



## TECHNICAL SPECIFICATIONS

	Characteristics	Connection
<b>Input signals</b>		
Operating speed range	From 30 to 6000 RPM (0.5 at 100Hz)	
TTL input : 1/Rev and N/Rev	0 – 5V	BNC
Differential input : 1/Rev, Track A and Track B	±5V	MINICONNEC
<b>Output signals at converter speed</b>		
TTL output: Top0	(0 – 5V) 1/Rev input signal offset by 0.0 to 359.9°	BNC
TTL output: N/Rev	(0 – 5V) Identical to the N/Rev input or Track A	BNC
<b>Output signals at CAM speed</b>		
Programmable speed ratio « converter speed : AAC speed »	1, 1/2, 2, 5/6, 2/3, etc...	
Speed of generated signals	From 30 to 6000 RPM (0.5 at 100Hz)	
TTL output: 1/Rev, 3600/Rev	0 – 5V	BNC
Output : N1/Rev, N2/Rev	0 – 5V from 30 to 7200 teeth per revolution	BNC
CAM signal	1 to 8 programmable teeth	
CRANK signal	30 to 1800 teeth Withdrawal of 0 - 8 teeth 2 CRANK frames generated during 1 CAM frame.	
TTL output: CAM and CRANK	0 – 5V	MINICONNEC
Analog output : CAM and CRANK	±5V or ±15V	MINICONNEC
Angular resolution	0.1°	
<b>Monitoring</b>		
Logical output status	0 – 5V	MINICONNEC
Dialogue interface	RS 232 (ModBus protocol)	Sub-D 9
Diagnostic input/output		Sub-D 9
<b>Other parameters</b>		
Power supply	230V/50Hz or 115V/60Hz	
Dimensions	3U / 84TE / 19"	
Weight	3.5 Kg	



Order reference  
**EFS 8358**



YOUR PARTNER IN ELECTRONICS

BP 34 F - 69390 Millery  
Tel. : +33 (0)4 72 49 27 72  
Fax : +33 (0)4 72 49 27 77  
E-mail : efs@efs.fr  
Site : www.efs.fr

North American Rep:  
**BEACON DYNAMICS**

Beacon Dynamics Inc.  
275 Route 10E - Suite 220-164  
Succusunna, NJ 07876  
Tel. 973-442-6450  
info@beacondynamics.com