# DEALER INFORMATION

KTM690DUKE







Status: Feb. 2008



## APPROACH & TARGET GROUP

## THE ULTIMATE SINGLE CYLINDER NAKED BIKE

#### **Product approach:**

In terms of image, the "DUKE" is one of the biggest company values – that has to be used with the new LC4 concept, to establish it as a trademark for single cylinder naked bikes.

#### **Positioning:**

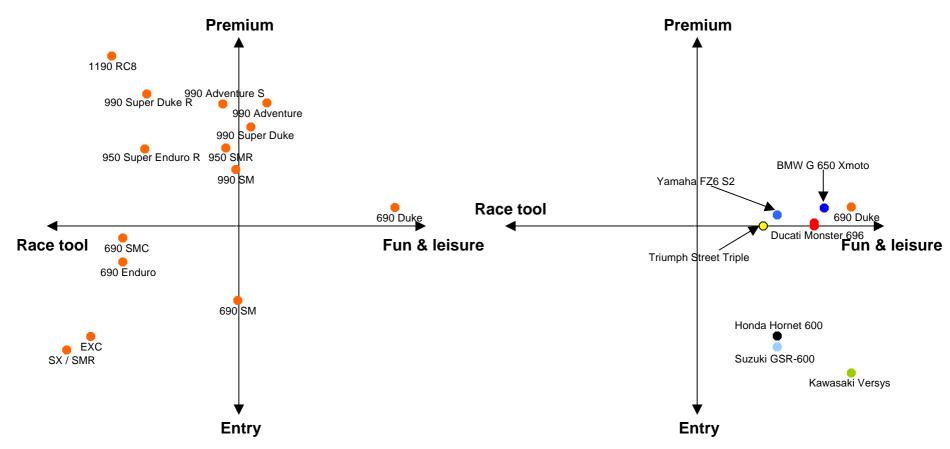
On the one hand the new 690 Duke leads the market of typical single cylinder fun bikes like the BMW Xmoto with superior performance, on the other hand the bike has all qualities in terms of engine and chassis to compete seriously against multi-cylinder naked bikes. The new 690 Duke will attract especially owners of a Ducati Monster 620/695, but Honda Hornet 600, Kawasaki Versys or Yamaha FZ6 riders as well.

#### Target group:

All existing Duke riders. Every biker who loves light and sporty naked bikes with a relation to design and performance.



## **INTERNAL & EXTERNAL POSITIONING\***



<sup>\*</sup> Description of the respective model within the KTM model line-up and compared to its competitors with regard to usage and price positioning (Entry ←→ Premium) respecitvely



### **BIKE BASIS & MAIN DIFFERENCES**

The 690 Duke is **based on the chassis of the 690 SM/SMR**, whereby the major differences are the following:





## **TECHNICAL DATA**







Top Competitors	KTM 690 Duke '08	BMW G 650 Xmoto '08	Ducati Monster 696 '08	Triumph Street Triple '08
Engine				
Engine type	Single cylinder, 4-stroke	Single cylinder, 4-stroke	L-Twin cylinder, 2 valves per cylinder Desmodromic	In-line 3-cylinder, 4-stroke
Displacement	654 cc	652 cc	696 cc	675 cc
Power	48 kW @ 7500 rpm	39 kW @ 7000 rpm	58.8 kW @ 9000 rpm	79 kW @ 11700 rpm
Torque	67 Hm @ 5500 rpm	60 Nm @ 5250 rpm	69 Nm @ 7750 rpm	69 Nm @ 9100 rpm
Transmission	6 gears	5 gears	6 gears	6 gears
Fuel system	Keihin EFI with EPT (Electr. Power Throttle)	Electronic intake pipe injection	Siemens electr. fuel injection, 45 mm THB	Multipoint sequential EFI
Final drive	X-ring chain / 16 : 40	O-ring chain	Chain / 15 : 41	O-ring chain
Clutch	APTC slipper clutch, hydraulically operated	Wet multi-disc clutch, mechanically operated	APTC wet multiplate, hydraulically operated	Wet, multi-plate
Chassis				
Frame	Chromium-Molybdenum trellis frame, powder coated	Bridge-type steel section frame	Tubular steel trellis frame	Aluminium beam twin spar
Front suspension	WP-USD Ø 48 mm	USD Ø 45 mm	Showa 43 mm USD-fork	Kayaba 41 mm USD
Rear suspension	WP-Monoshock with Pro-Lever linkage	Central spring strut	Sachs Monoshock	Kayaba Monoshock
Suspension travel front / rear	140 / 140 mm	270 / 215 mm	120 / 148 mm	120 / 126 mm
Front brake	Brembo four piston, radially bolted caliper, brake disc Ø 320 mm	Single disc, floating brake disc, diameter 320 mm, four-piston fixed caliper	2 x 320 mm discs, 4-piston radial caliper	2x 308 mm floating discs, Nissin 2-piston sliding calipers
Rear brake	Brembo single piston, floating caliper, brake disc Ø 240 mm	Single disc, diameter 240 mm, single-piston floating caliper	245 mm disc, two-piston caliper	220 mm disc, Nissin 1-piston sliding caliper
Front / rear rims	Cast aluminium wheels 3.50 x 17" / 5.00 x 17"	Cast aluminium wheels 3.50 x 17" / 4.50 x 17"	3-spoke light alloy wheels 3.50 x 17" / 4.50 x 17"	5-spoke cast aluminium alloy 3.50 x 17" / 5.50 x 17"
Seat height	865 mm	880 - 900 mm (low seat 860 - 880 mm)	770 mm	800 mm
Fuel capacity	approx. 13.5 litres / 2.5 litres reserve	9.5 litres / 2 litres reserve	15 litres / 3.5 litres reserve	17.4 litres
Weight (ready to race)	approx. 148.5 kg (without fuel)	147 kg (dry!)	163 kg (dry, without battery!)	167 kg (dry!)
Others				
ABS	no	optional (can be switched off)	no	no
Related products	Evolution titanium silencer set, crash pads,	n.s.	n.s.	Various silencer sets, bar end mirrors, bellypan,
	tank bag, rear bag, topcase, touring			flyscreen kit, alarm immobilizer, carbon
	windscreen, alarm system, etc.			mudguard, tail pack kit, gel seat, tank bags, etc.
Fuel consumption	approx. 5 litres / 100 km	approx. 5 litres /100 km	n.s.	approx. 5 - 5.5 litres / 100 km
V max (km/h)	190 km/h	approx. 170 km/h	n.s.	n.s.
25 kW (yes / no)	yes	yes	yes	yes
Service intervals	1,000 km / 5,000 km / all subsequent 5,000 km	n.s.	1,000 km /12,000 km / all subsequent 12,000 km	n.s.
Warranty	24 month without limitation of km	n.s.	24 month without limitation of km	n.s.



## TECHNICAL DATA









Top Competitors	Kawasaki Versys '08	Honda Hornet 600 '08	Suzuki GSR-600 '08	Yamaha FZ6 S2 '08
Engine				
Engine type	2-cylinder, 4-stroke	Inline-Four cylinder, 4-stroke	Inline-Four cylinder, 4-stroke	Forward inclined parallel Four cylinder, 4-stro
Displacement	649 cc	599 cc	599.4 cc	600 cc
Power	47 kW @ 8000 rpm	75 kW @ 12000 rpm	72 kW @ 12000 rpm	72 kW @ 12000 rpm
Torque	61 Nm @ 6800 rpm	63.5 Nm @ 9500 rpm	64.7 Nm @ 9600 rpm	63.1 Nm @ 10000 rpm
Transmission	6 gears	6 gears	6 gears	Constant mesh, 6-speed
Engine management	Keihin EFI, throttle body 38 mm	PGM-FI electronical fuel injection	Electronical fuel injection	Electronic fuel injection
Final drive	Chain	Chain	Chain / 16 : 48	Chain
Clutch	n.s.	n.s.	Wet multi-plate clutch	Wet, multiple-disc
Chassis				
Frame	Semi-double cradle, high-tensile steel	n.s.	Aluminium frame	Aluminium die-cast, diamond shaped
Front suspension	USD telescopic fork Ø 41 mm	USD Ø 41 mm	Telescopic front fork Ø 43 mm	Telescopic front fork
Rear suspension	Offset laydown single shock	Monoshock	Link type, coil spring, oil damped	Swingarm (monocross)
Suspension travel front / rear	150 / 145 mm	120 / 128 mm	130 / 134 mm	130 / 130 mm
Front brake	Dual 300mm petal discs with two-piston caliper	2x 296 mm floating disc, dual-piston calipers, floating rotors	2x 310 mm disc, four-piston calipers	Double disc, Ø 298 mm
Rear brake	Single 220mm petal disc with single-piston caliper	240 mm disc, single-piston caliper	240 mm disc, single-piston caliper	Single disc, Ø 245 mm
Front / rear rims	n.s.	Cast aluminium wheels 3.50 x 17" / 5.50 x 17"	Cast aluminium wheels 3.50 x 17" / 5.50 x 17"	Cast aluminium wheels 3.50 x 17" / 5.50 x
Beat height	840 mm	800 mm	785 mm	795 mm
Fuel capacity	19 litres	19 litres / 4 litres reserve	16.5 litres	19.4 litres / 3.6 litres reserve
Weight (ready to race)	184 kg (dry!)	198 kg (incl. Fuel) / 203 kg (ABS, incl. Fuel)	188 kg (dry!)	approx. 180 kg (dry!) / 185 kg (ABS, dry
Others				
NBS	yes	yes (optional)	yes (optional)	yes (optional)
Related products	Various luggage systems, windsheelds, seats,	n.s.	Suzuki Aluminium silencer, luggage system, tank	Rear fender, seat cover, windscreen, full fa
	bike coverings, tank pad, tie downs, D-lock etc.		bags, various carbon parts, crash pads, windscreens, alarm system, etc.	heated grips
Fuel consumption	4.1 I / 100 km	n.s.	approx. 4.5 litres / 100 km	n.s.
/ max (km/h)	185 km/h	> 200 km/h	n.s.	n.s.
25 KW (yes / no)	yes	n.s.	n.s.	n.s.
Service intervals	n.s.	1,000 km / 6,000 km / all subsequent 6,000 km	n.s.	n.s.
Warranty	24 month (extension possible> K-Care)	24 month without limitation of km	n.s.	n.s.



## **TOP ARGUMENTS & FEATURES (1)**



#### Single cylinder vs. multicylinder

- → Less rotating masses & lower engine weight mean extremely easy handling and cornering
- → Lighter, more compact engine which leads to a narrower chassis
- → A narrower chassis implies higher corner speed → increase of achievable declination
- → Torque characteristic allows short gearing which leads to impressive acceleration

#### Less weight of the whole Bike allows

- → Usage of lightweight rims
- → Usage of just one Brembo brake disc
- → All in all, this results in less rotating & unsprung masses which lead to a remarkably agile and impressively handy KTM bike





#### The strongest homologated single cylinder bike ever!

- → 65 hp compared to 62/63 hp (690 Enduro&SMC / 690 SM&SM R) due to another exhaust system and modified camshaft profiles
- > 10 hp plus than any other competitors' single

Higher torque @ less rpm than any other comparable inline-4-cylinder (see "Technical Data")!

> 5 kg lighter than the BMW G 650 Xmoto (see "Technical Data")!





## **TOP ARGUMENTS & FEATURES (2)**



**Innovative Underfloor-exhaust system** positioned close to the centre of gravity leads to a weight distribution of 51.5% (front) and 48.5% (rear) which helps to reach the superb rideability

#### Premium, fully adjustable WP Suspension components

- → 48 mm USD fork: adjustable in rebound and compression for comfortable riding up to racing purposes
- → WP Monoshock with Pro-Lever-linkage adjustable in rebound and high/low speed compression
- → The competitors' rear shocks are just adjustable in rebound with less adjustment possibilities!





Die-cast aluminium swingarm

Seat height of just 865 mm





#### Keihin EFI with EPT (Electronic Power Throttle) and Map select switch

- → "Soft" reduced homologated peak performance for better driveability (Pos. 1)
- → "Advanced" homologated performance with extremely direct responsiveness (Pos. 2)
- → "Standard" homologated performance with balanced responsiveness (Pos. 3, 4, 5, 6, 7, 8 or 9)



## **TOP ARGUMENTS & FEATURES (3)**



**APTC slipper clutch** (with the exception of Ducati no other manufacturer offers it as standard!)

Renthal aluminium handlebar, tapered







RADIAL clutch master cylinder & brake master cylinder



- → Front: Single 320 mm disc, radially mounted 4-piston caliper with 4 brake pads
- → Rear: Single 240 mm disc, floating 1-piston caliper











Unique appearance and famous "cultbike" image



## **TOP ARGUMENTS & FEATURES (4)**



Strong commitment to high-quality producers and components

Examples: WP Suspension, Brembo, Marchesini, Excel, Keihin, Acerbis and many more!

#### High vertical range of manufacture

→ Main components, such as the frame, engine, front fork (WP Austria, located in the KTM headquarters) and exhaust system, are **developed and produced by KTM in Mattighofen!** 





Not only with KTM Offroad bikes, but **also with KTM street models** the company already established itself as a **very competitive manufacturer** which offers **high-end bikes with an outstanding performance and design** 

→ Example: 990 Super Duke was awarded "'07 Motorcycle of the Year" in the US!



### **POWER PARTS**

- > Evolution titanium silencer set
- > Tank bag, rear bag, topcase
- Crash pads
- Alarm system
- > Touring windscreen
- Various carbon parts etc.

### **GENERAL INFORMATION & CONCLUSION**

With fully homologated 65 hp, the 690 **Duke** will arrive as the strongest single cylinder bike ever. The power increase is a result of the new exhaust system together with modified camshaft profiles. Even if the new Duke is already the third edition, the name will be just "690 Duke". The 2-seater is available in two colour schemes (white/black, orange/black).

